For future updates, please refer to the MDT website at http://www.mdt.mt.gov/. Once at the site, click on Doing Business tab OR click on http://www.mdt.mt.gov/business/contracting.shtml/. Under the Specifications heading (on the left-hand side of the page), click on Supplements.

The following Subsections have been revised since April 1, 2006. Current revisions are noted by an * before the date on this index.

SUPPLEMENTAL SPECIFICATIONS TO MONTANA
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
2006 EDITION

SUBSECTION	TITLE	PAGE	DATE
101.01	General (Dual Units)	1	3-1-07
101.03	Definitions (Roadside Development)	8	*2-19-09
101.03	Definitions	10	3-1-07
102.07	Bidding Requirements	13	10-1-06
102.08	Rejection of Bid Proposals	14	5-1-08
102.08	Rejection of Bid Proposals	14	10-1-06
102.11	Withdrawal of Proposals	15	3-1-07
102.15	Venue	16	*2-19-09
102.17	Public Works Contracts	16	12-18-08
103.07	Execution and Approval of Contract	17	8-1-06
103.09	Submission of Bid Documentation	18	12-18-08
104.02.3	Significant Changes in the Character of Work	22	11-1-06
104.02.4	Change Orders	22	11-8-07
104.05.2	Failure to Properly Maintain Roadway or Structure	23	3-1-07
104.05.4	Maintenance for Traffic During Work Suspensions	24	3-1-07
104.06	Rights In and Use of Materials Found on the Work	24	10-1-06
104.08	Value Engineering Proposals	25	11-8-07
105.02	Contractor Furnished Drawings and Submittals	27	7-3-08
105.03.1	General (Conformity With Plans and Specifications)	27	*2-19-09
105.03.2	Items Designated for Acceptance on a Lot Basis (Quality Assurance)	28	10-1-06
105.03.2	Items Designated for Acceptance on a Lot Basis (Quality Assurance)	27-29	12-27-07
105.03.3(A)	Gradation (Quality Incentive Allowance)	29	10-9-08
105.03.4	Table of Contractor Submittals	30	7-31-08
105.05	Cooperation by Contractor	31	3-1-07
105.08.5	Survey Tolerances and Inspection	33	1-31-08
105.13	Equipment	35	10-1-07
105.15.2	Final Inspection	35	7-3-08
105.15.2	Final Inspection	35	11-8-07
105.15.3	Final Acceptance	36	7-3-08
105.16.1	Notice of Claim	36	7-31-08
105.16.3	Decision on Claims	38	8-28-08
106.01.1	Source of Supply	39	8-1-07
106.02.3	Contractor-Furnished Sources	40	5-1-08
106.05	Field Laboratory	42	3-1-07
106.09	Domestic Materials	43	7-3-08
107.02	Permits, Licenses, and Taxes	45	7-3-08
107.06	Public Convenience and Safety	46	5-1-08
107.08	Load Restrictions	47	8-1-07
107.08	Load Restrictions	47	6-1-06
107.13.1	Insurance on All Contracts	50	9-1-07
107.17	Contractors Responsibility For Work	51	10-9-08
108.01.2	Contract Performance	57	3-27-08
108.03.1	General (Prosecution of Work)	58	3-1-07
108.03.1	General (Prosecution of Work)	58	1-31-08
108.03.2	Project Schedules	59	1-31-08
108.03.3	Critical Path Method (CPM) Scheduling	60	1-31-08
108.07.1	Calendar Date Contracts	62	7-3-08
108.07.3	Working Day Contracts	63	*2-19-09
108.07.3	Working Day Contracts	63	9-1-06
108.07.3	Working Day Contracts	63	6-1-06
108.07.3	Working Day Contracts	63	3-1-07
108.07.5	Extensions (Time)	64	11-8-07
108.08	Failure to Complete on Time	65	11-8-07
108.08	Failure to Complete on Time	66	10-9-08
109.04.1	Unit Price or Lump Sum Basis (Extra Work)	72	3-1-07
109.04.2	Force Account Basis	72	5-1-08
109.06	Partial Payments	74	7-3-08
109.07	Payment for Material on Hand	75	5-1-08
109.08	Final Estimate	77	11-8-07
109.09.1	General (Mobilization)	77	3-1-07
109.09.2	Payment (Mobilization)	77	3-1-07
109.10	Overpayments	78	3-27-08

SUPPLEMENTAL SPECIFICATIONS TO MONTANA
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
2006 EDITION

SUBSECTION	TITLE	PAGE	DATE
109.11	Fuel Price Adjustment	78	10-1-06
109.11	Fuel Price Adjustment	78	3-1-07
202.03.1(B)	Removal of Substructure	85	7-3-08
202.03.1(C)(2)	Concrete and Masonry (Removal of Structures)	85	6-1-06
202.03.3	Removal of Pavement, Sidewalks, Curbs, etc.	86	6-1-06
203	Excavation and Embankment	87	10-9-08
208.03.6	Inspections (General Storm Water Permits)	108	10-9-08
208.05	Basis of Payment – Temporary Erosion Control	108	1-31-08
301.03.1(B)	Acceptance Sampling and Testing (Aggregate Surfacing)	123	1-15-09
301.03.1(B)	Acceptance Sampling and Testing (Aggregate Surfacing)	123	7-31-08
301.03.1(B)	Acceptance Sampling and Testing (Aggregate Surfacing)	123	10-1-06
301.03.1(C)	Aggregate Surfacing-Acceptance (Aggregate Surfacing)	124	10-1-06
301.03.5(D)	Compaction (Aggregate Surfacing Construction)	126	1-31-08
304.02.1	Portland Cement	135	3-1-07
401.03.10	Spreading and Finishing	152	3-1-07
401.03.11	Constructing Joints	153	3-1-07
401.03.12(A)	Compaction	153	1-31-08
402.03.5	Acceptance	158	12-27-07
407.02.1	Bituminous Material	169	3-1-07
409.01.1	Contract Time	171	7-3-08
409.03.3	Seasonal and Weather Limitations (Seal Coat)	172	12-18-08
409.03.6	Application of Fog Seal	173	7-31-08
409.03.6	Application of Fog Seal	173	9-1-07
409.03.7	Application of Seal Coat Materials	173	3-1-07
409.03.8	Warranty (Seal Coat)	173	7-31-08
551.03.2(A)	Design (Composition of Concrete)	200	7-3-08
551.03.7(A)(4)	Flowable Fill (Testintg and Acceptance of Concrete)	208	3-1-07
552.03.9(A)	General (Cold Weather Concreting)	218	3-27-08
555.03.3	Placing and Fastening (Reinforcing Steel)	246	9-1-06
556.03.1	Pre-qualification	249	7-3-08
559.02.2	Furnish Pile	269	*2-19-09
559.02.4	Splicing Piles	269	*2-19-09
559.02.5	Holes in Piling	269	*2-19-09
559.03.3	Pile Capacity	271-273	1-31-08
559.03.3(B)(2)	Dynamic Load Tests (Pile Capacity)	273	*2-19-09
559.03.5	Service Pile	274	*2-19-09
559.03.7	Steel Pipe Pile	274	*2-19-09
559.03.8	Painting Steel Pile or Steel Pipe Pile	275	12-27-07
559.04.1	Load Tests (Piling)	275	*2-19-09
559.04.2	Furnish Pile	275	*2-19-09
559.05	Basis of Payment (Piling)	276	*2-19-09
603.03.4	Backfilling (Culverts and Pipes)	284	3-1-07
603.04.3	Bedding and Foundation Material	285	11-8-07
606.03.2	Installing Posts	290	12-27-07
607.02.1	Snow Fence (New)	295	12-27-07
609.04	Method of Measurement (Curbs and Gutters	304	10-1-06
609.05	Basis of Payment (Curbs and Gutters)	304	10-1-06
610.03.2(A)	General (Seeding, Fertilizing, and Mulching)	305	7-31-08
610.04.4	Condition Seedbed Surface	308	7-3-08
610.05	Basis of Payment (Revegetation)	309	7-3-08
611.02.3	Paint (Cattle Guards)	311	12-27-07
612.01	Description (Paints and Painting)	313	*2-19-09
612.02	Materials (Paints and Painting)	313	*2-19-09
612.03.6	Application of Powder Coat	317	*2-19-09
612.04	Method of Measurement	317	*2-19-09
612.05	Basis of Payment	318	*2-19-09
614.02	Materials (Retaining Walls)	323	12-27-07
617.04.2	Traffic Signals and Lighting	336	12-27-07
617.05	Basis of Payment	336	12-27-07
618.03.2	Traffic Control Plan	339	11-8-07
618.03.6	Access Breaks	340	2-5-09
618.03.7(A)	Crossing, Entering and Using Roadways	341	11-8-07
618.03.7(B)	Limited Access and Multiple-Lane Roadways	341	7-3-08
618.03.11	Traffic Control for Seal Coat Operations	344	7-3-08
618.04.1	Traffic Control Devices	347	*2-19-09
618.04.6	Items Not Eligible for Separate Payment	347	6-1-06
618.04.6	Items Not Eligible for Separate Payment	347	10-1-06
618.05.1	Traffic Control Devices	348	1-1-07

**SUPPLEMENTAL SPECIFICATIONS TO MONTANA
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
2006 EDITION**

SUBSECTION	TITLE	PAGE	DATE
620.03.2	Layout of Pavement Markings	357	5-1-08
620.03.6	Epoxy Pavement Markings	359	12-18-08
620.03.6	Epoxy Pavement Markings	359	6-1-07
620.03.6	Epoxy Pavement Marking	360	3-27-08
620.03.7(H)	Thermoplastic Pavement Marking Application	362	6-1-06
620-03.7(I)	Thermoplastic Pavement Marking Glass Bead Application	363	6-1-06
620.04.1	Temporary and Interim Pavement Marking Quantities	364	3-27-08
620.04.2	Epoxy Pavement Markings	364	3-27-08
620.04.4	Painted Pavement Markings and Curbs	364	6-1-07
620.05	Basis of Payment (Pavement Markings)	365	6-1-07
623.01	Description (Mailboxes)	375	9-1-07
623.02	Materials (Mailboxes)	375	9-1-07
623.03	Construction Requirements (Mailboxes)	375	9-1-07
623.04	Method of Measurement (Mailboxes)	375	9-1-07
701.02.1	General Requirements – Aggregate for Surfacing	380	5-1-08
701.02.8	Crushed Cover Aggregate-Cover Material	385	7-31-08
701.03.1	General Requirements – Aggregate for Bituminous Mixtures	386	5-1-08
701.04.1	Bedding Material (Table 701-17 Table of Gradations)	388	3-1-07
701.11	Glass Cullet	391	1-31-08
702.01	Bituminous Materials	393	7-3-08
702.02	Testing and Acceptance	394	7-3-08
702.02	Testing and Acceptance (Table 702-2 Schedule of Tolerances)	394	7-1-06
702.02	Testing and Acceptance (Table 702-8 CRS-2 Emulsified Asphalt)	399	7-1-06
703.02.1	Plastic Conduit	401	12-18-08
703.16	Class 4 Treated Timber Poles	417	9-1-07
703.17.3	Wood Poles for Overhead Conductor Highway Lighting	417	9-1-07
703.17.7	Overheight Detector	419	12-27-07
704.01.5	Treated Timber Posts	422	9-1-07
704.01.6	Treated Timber Poles	423	9-1-07
704.01.7	Barn Poles	423	9-1-07
705.01.2	Wood Posts and Blockouts	427	9-1-07
705.03.1	Wood Treatment	428	9-1-07
706.04	Treated Timber and Lumber	429	9-1-07
706.04.1	Treating	429	9-1-07
706.04.2	Incising	429	9-1-07
706.04.3	Inspection	430	9-1-07
706.05(A)	Timber Piles	430	9-1-07
707.02.1	Rubber Gaskets	431	6-1-06
707.02.2	Flexible Plastic Gaskets	431	6-1-06
710.02.3	Paint Coating Systems for Structures	445	3-1-07
710.03	Prequalification and Certification (Powder Coating)	446	*2-19-09
712.01.1	General (Chain Link Fence)	451	10-9-08
712.01.6	Tie Wire (Fence)	451	10-9-08
712.01.7	Tension Wire (Fence)	451	10-9-08
712.02.1	Woven Wire (Fence)	454	10-9-08
712.02.2	Barbed Wire	454	10-9-08
712.02.7	Metal Posts and Assemblies (Fencing)	454	9-1-06
712.02.8	Wood Fence Posts and Brace Rails	455	9-1-07
713.12.1(C)	Wood Excelsior Fiber Blankets (Type EX 3)	461	7-3-08
713.12	Soil Retention/Erosion Control Blankets and Mats	461	7-3-08
714.02	Temporary Pavement Marking Tabs	465	5-1-08
714.04	Temporary and Interim Paint Markings	467	12-18-08
714.05	Reflective Glass Beads	467	3-1-07
714.05	Reflective Glass Beads	468	12-18-08
714.08(B)	Materials (Epoxy Pavement Marking Material)	471	7-3-08

MONTANA SUPPLEMENTAL SPECIFICATIONS

The following are supplementary or amendatory to the 2006 Edition of the Standard Specifications for Road and Bridge Construction insofar as they apply to this contract.

101.01 GENERAL (DUAL UNITS) Page 1 3-1-07

Add the following paragraph after the first paragraph:

The Standard Specifications are written in dual units with English units first, followed by Metric units in parenthesis. The contract will be in one of the two units. All submittals and documentation provided to the Department must be in English or Metric units as shown in the contract.

101.03 DEFINITIONS (ROADSIDE DEVELOPMENT) Page 8 2-19-09

Add the following paragraph at the end of ROADSIDE DEVELOPMENT:

Unless specified different in the contract, the following are the roadside areas:

- Area 1. Areas with slopes of 3:1 and flatter.
- Area 2. Areas with slopes steeper than 3:1.
- Area 3. A 15.0 foot (4.5 meter) wide strip adjacent and parallel to the finished pavement, along both roadsides.

101.03 DEFINITIONS Page 10 3-1-07

Rescind the second sentence of the definition for WORKING DAY (that begins with “Working days will be …”) and replace with the following:

Working days will be charged from November 16 through April 15 for all days construction activities occur that have any impact on the traveling public, exclusive of emergency and maintenance repairs to the project, when the time requirements under Subsection 104.05.2 are met.

102.07 BIDDING REQUIREMENTS Page 13 10-1-06

Add the following paragraph at the end of 102.07 (C) (2) Proposal Guarantee:

An electronic bid bond may be filed in lieu of completing the paper Bid Bond area of the Proposal Bid form. Submit on the most current Department-provided hard copy Electronic Bid Bond Form CPB_102_07.

102.08 REJECTION OF BID PROPOSALS Page 14 5-1-08

Delete the last sentence under part E that reads “(See Subsection 102.10 (B) (6)).”

102.08 REJECTION OF BID PROPOSALS Page 14 10-1-06

Delete 102.08 (A) starting with “Failure to complete …..” and replace with the following:

A. Failure to complete the appropriate bid bond form, or Proposal, provided by the Department, by all specified persons, including notaries, in the correct blocks.

Delete 102.08 (G) starting with “Bidder fails to …” and replace with the following:

G. Bidder fails to properly complete and sign, by original signatures, on the most current Department-furnished Proposal and appropriate bid bond form. Stamped signatures are not authorized.

102.11 WITHDRAWAL OF PROPOSALS Page 15 3-1-07

Delete the words “or telegram” from the first sentence.

102.15 VENUE Page 16 2-19-09

Rescind 102.15 and replace with the following:

In the event of any dispute concerning a project, whether over its advertisement, bidding, award, execution, or claim, any litigation filed by or against the Department has venue only in Lewis and Clark County.

102.17 PUBLIC WORKS CONTRACTS Page 16 12-18-08

Add the following Subsection:

102.17 PUBLIC WORKS CONTRACT
Department projects under these specifications are public works contracts. Projects under these specifications require Contractors to provide all resources necessary to complete the project, fully complying with its plans and specifications. They are not “sales”, nor are they sales of “goods”, as those terms are used in Montana’s Uniform Commercial Code (UCC). The UCC, particularly its Chapter 2, does not apply to these projects, and the contractor concurs with that by submitting its bid.

103.07 EXECUTION AND APPROVAL OF CONTRACT Page 17 8-1-06

Rescind part D under the third paragraph and replace with the following:

D. Possessing a current special fuel user permit issued under 15-70-302 MCA, or a letter stating that no special fuel will be used.

103.09 SUBMISSION OF BID DOCUMENTATION Page 18 12-18-08

Rescind Subsection 103.09 and replace with the following Subsections:

103.09 SUBMISSION OF BID DOCUMENTATION

103.09.1 General
The following requirements apply when submission of bid documents is required by the contract.

103.09.2 Bid Documents
The term "Bid Documentation," as used in this specification, means any writings, working papers, computer printouts, charts, schedules of any kind (e.g., CPM, bar chart, etc.), and any data compilations, computerized or not, used by the Contractor to determine the bid it submits for this project. "Bid Documentation" includes, but is not limited to, Contractor equipment internal rates for ownership, Contractor overhead rates, labor rates, cost coding, equipment and manpower loading of activities, efficiency or productivity factors, scheduling calculations, written review or analysis of the site of the work, written analysis of how the work should be performed, arithmetic extension, worksheets used to prepare the bid (identifying by name and edition any software programs used to prepare them), and all quotations to the extent that these items were used in formulating and preparing the amount of the bid. "Bid Documentation" also includes identification of all manuals which are standard to the industry used by the Contractor in preparing the bid for this project. (Include these manuals in the bid documentation and the inventory by reference to their title, author, edition, date and page or section number.) The term does not include bid documents provided by the Owner (e.g., plans, specifications, etc.) for use by the Contractor in bidding on this project.

103.09.3 Bid Documentation Inventory Form
Use the most current Department Form CSB103_09 “Bid Documentation Inventory” with the bid documentation. Follow all directions for the bid documentation listed on Form CSB103_09. The forms must be signed by an authorized agent for the bidder. The form is available at the following web page:
http://www.mdt.mt.gov/publications/forms.shtml#contract

103.09.4 Submission and Storage of Bid Documents
No later than the fourth business day after the date of bid-opening (the date of bid opening to count as the first full day), the apparent low bidder must submit to the Contract Plans Bureau, during its regular work hours, a legible copy of all bid documentation it used to prepare its bid.
Place the bid documentation in sealed envelopes no smaller than 8 1/2-inch x 11-inch and no larger than 10-inch x 13-inch. If multiple sealed envelopes are provided in some form of container, do not lock or seal it. Submit two completed “Bid Documentation Inventory” (Form CSB103_09) with the bid documentation, signed by an authorized agent for the bidder. Use the most current Department form.
The container (if used) will be emptied and the sealed envelopes secured by an agent of the Department's Construction Administration Services Bureau at the place of storage in Helena. An agent of the Contractor, at its discretion, may be present at the time the documentation is placed in the Department’s place of storage. One Form CSB103_09 must be attached to the outside of the first sealed envelope and the other will be kept in the Construction Administration Services Bureau's project file.
If the apparent low bidder, for whatever reason, is not awarded the contract, the apparent second low bidder will be told that it has four business days from the date of its verbal notification (followed immediately in writing) to comply with the above requirements. That Contractor must comply with those requirements.

103.09.5 Bid Responsiveness

The Bid Documentation Inventory form on the outside of the first envelope will be reviewed for completeness and responsiveness. If found to be incomplete, or if it is determined that the contents are not accurately shown on the inventory, the bid will be considered non-responsive and rejected under 102.08.

A bidder's failure to provide its full bid documentation automatically makes its bid non-responsive and it will be rejected. It will also be considered a refusal to enter into the contract, and the bidder's proposal guaranty will be forfeited due to its failure to evidence its good faith in fully submitting that bid. The second low, responsive responsible bid will then be reviewed and required to meet the above requirements.

103.09.6 Opening of Bid Documentation

If the bid documents are opened for the reasons in parts A and B below, they will be opened the next business day following notification. The bid documents will be reviewed in an attempt to resolve the issues. The apparent low bidder or its representative may be present during the opening. Whenever the bid documents are opened, the documents become the property of the Department for its use.

A. Award Guidelines. The bid documents may be opened if the bid is outside the award's guidelines. The Department will attempt a resolution with the Contractor first and the bid documentation will only be opened if the Contractor cannot provide written justification for being outside of the guidelines to the Department's satisfaction.

B. Unbalanced Bid. The bid documents may be opened if the bid has items that appear to be unbalanced, either materially or mathematically.

C. Claims. In the event that the Contractor submits a written notice of claim requesting compensation, reimbursement or contract time, or an action in any court, based upon the contract, is filed; the copies of the bid documentation become the property of the Department for its use, specifically including use in preparing for and conduct of all claims, disputes, or litigation. Failure to submit all documentation and inventory as required above, or listing on the inventory documentation that is not actually provided as required, will be a material breach of the contract, is a failure to comply with a condition precedent to filing a claim or lawsuit, acts as a total and final waiver of all claims or disputes involving matters that would have been included (e.g., claims of delay, changed site conditions, loss of productivity, etc.), and subjects the Contractor to action under ARM 18.3.101 et seq.

If the bid documents are opened subsequent to a written notice of claim, the Contractor will be notified and may have a representative present during the opening.

103.09.7 Return of Bid Documentation

The bid documentation will remain in the storage location during the life of the contract. It will be returned after a certificate of completion has been issued for the project and a release of claims has been signed. An agent of the Contractor may be present at the time the documents are removed from the storage location.

104.02.3 SIGNIFICANT CHANGES IN THE CHARACTER OF WORK Page 22 11-1-06

Delete the first sentence of paragraph four (that begins with "The term …") and replace with the following:

The term "significant change" applies when one or more of the following circumstances is met:

104.02.4 CHANGE ORDERS Page 22 11-1-07

Rescind Part C. in the first paragraph (that begins with "Contract time …") and replace Part C. with the following:

C. Contract time adjustments per Subsection 108.07.05.

104.05.2 FAILURE TO PROPERLY MAINTAIN ROADWAY OR STRUCTURE Page 23 3-1-07

Rescind Subsection 104.05.2 and replace with the following:

The Project Manager will immediately notify the Contractor if it fails to maintain the project. Failure to begin to remedy unsatisfactory maintenance within 4 hours of notification may result in:

- The Department performing the required repair. The cost of the repair will be deducted from monies due or to become due to the Contractor, or otherwise be billed to the Contractor.
- Contract time being charged. Contract time will be charged starting on the day of the Department's initial notification and will continue until the repairs are made and the Project Manager approves the repairs.

104.05.4 MAINTENANCE FOR TRAFFIC DURING WORK SUSPENSIONS Page 24 3-1-07

Rescind Subsection 104.05.4 and replace with the following:

A. Temporary Suspension. Make passable and open to traffic all portions of the project, connections, and temporary roadways before temporary work suspensions. Maintain parts of the project, connections, temporary roadways, and detours under traffic at Contractor expense during work suspensions.

B. Winter Suspension. Be responsible for all traffic control and maintenance during winter weather shutdowns, including the time between November 16th and April 15th. Be responsible for all snow removal, sanding, and de-icing for all roadways not completed through the first lift of plant mix surfacing. Furnish all necessary

supervision, personnel, and equipment to maintain the road in a safe condition and at the highest level of service to traffic.

The Department is not responsible for any repairs or maintenance to the project that results from snow plowing, sanding, and de-icing on any roadway not completed through top lift of plant mix surfacing.

The Contractor may request that the Department furnish all resources to perform snowplowing, sanding, and de-icing during winter suspension. This work would be detailed in a written agreement. Be responsible for all maintenance, traffic control, or other work not detailed in the agreement. Reimburse the Department, under an accounts receivable, for all Department plowing, sanding, and de-icing expenses according to the terms of the signed agreement.

Attend a meeting scheduled by the Department to review the project to develop the agreement details prior to the winter suspension.

Inspect the project at least once every 14 calendar days. Submit form CSB104_05_4 to the Project Manager within three days of the inspection.

Failure to maintain the project under these requirements will invoke Subsection 104.05.2.

Repair or replace all work and materials lost or damaged due to temporary use of the project. Maintenance work for acts of God or acts of the public enemy, or that are outside the Contractor's control during work suspensions is paid for at contract unit prices or as extra work.

104.06 RIGHTS IN AND USE OF MATERIALS FOUND ON THE WORK Page 24 10-1-06

Rescind Subsection 104.06 and replace with the following:

Apply for and obtain the Engineer's written approval prior to using excavated materials for other contract items. Designate in the request which contract item the second payment is for. Only one item will be eligible for payment when more than one field measurement by the Department would be required. Replace the removed material with acceptable material at Contractor expense.

Do not excavate or remove material from within the right-of-way that is outside the grading limits without written permission.

104.08 VALUE ENGINEERING PROPOSALS Page 25 11-1-07

Rescind the seventh paragraph (that begins with “The Department’s cost of …”) and replace with the following:

Costs incurred by the Department during a Preliminary Review will not be charged to the Contractor. If the proposal is advanced to the Detailed Review stage, costs incurred by the Department during the Detailed Review stage will be shared equally by the Department and the Contractor. The submittal of a formal proposal constitutes the Department's authority to deduct these costs from any monies due or that may become due to the Contractor under the contract.

105.02 CONTRACTOR FURNISHED DRAWINGS AND SUBMITTALS Page 27 *7-3-08

Rescind the third paragraph (that begins with “The Department has 20 working days …”) and fourth paragraph (that begins with “Working drawings, falsework plans…”) and replace with the following paragraphs:

The Department has 20 working days to review the submittals before returning them to the Contractor. The Department has 20 working days to review drawings returned for correction and that are re-submitted for review. The Department will consider extending contract time should the Department review exceed the 20 working day review time limit and the delay can be shown to affect the Contractor’s operation based on the current schedule.

The Department will perform an engineering review of the first submittal at no cost to the contractor. If the Department determines that the submittal fails to meet generally accepted engineering standards, it will return the submittal for correction. The Department will perform reviews of re-submittals with its own personnel when possible. If Department staff does not have time available to perform reviews, at the Department’s sole option it may hire a consultant engineer from outside the Department to finish the review process.

The Department will charge for reviews of re-submittals for its staff time and at the rate charged by a hired engineering firm for its staff time, if the Department hires one. The Department will subtract the charges from contractor payments.

Working drawings and falsework plans for facilities open to public travel are to be signed by a professional engineer before submittal to the Project Manager.

105.03.1 GENERAL (CONFORMITY WITH PLANS AND SPECIFICATIONS) Page 27 2-19-09

Rescind the third paragraph (that begins with “When a contract …”) and replace with the following:

When a contract item does not meet the contract requirements but is adequate to serve the design purpose, the Contractor will be notified in writing of the deficiency, and will be given the choice to remove and replace or correct the work at no expense to the Department, or to accept a reduction in the contract unit price. If the Contractor chooses to accept the reduction, the Department will determine the extent the work will be accepted and remain in place. The Project Manager may document the basis of acceptance by change order, providing a line item adjustment in the contract.

105.03.2 ITEMS DESIGNATED FOR ACCEPTANCE ON A LOT BASIS (QA) Page 28 10-1-06

Delete the Column for “Cleanness Value” under Table 105-1.

105.03.2 ITEMS DESIGNATED FOR ACCEPTANCE ON A LOT BASIS (QA) Page 27-29 12-27-07

Delete the fourth column titled “Penetration” from Table 105-1.
Delete the tenth row titled “AC in Plant Mix Surfacing and Base” from Table 105-1.

Delete the 6th row titled “Penetration, 85-100 asphalt cement” from Table 105-2.
Delete the 7th row titled “Penetration, 120-150 asphalt cement” from Table 105-2.
Delete the 8th row titled “Penetration, 200-300 asphalt cement” from Table 105-2.

105.03.3 (A) GRADATION (QUALITY INCENTIVE ALLOWANCE) Page 29 10-9-08

Rescind Part A under Subsection 105.03.3 (that begins with “When Volumetric Acceptance…”) and replace with the following:

A. Gradation. When “Volumetric Acceptance” is not specified, a 1.05 pay factor will be applied to non-commercial plant mix surfacing lots where the average results of aggregate gradation tests for the lot for the No. 4 (4.75 mm), No. 40 (0.425 mm), and No. 200 (0.075 mm) sieves are not more than one-half the allowable tolerance from the job mix target value.

A 1.05 pay factor will be applied to crushed base course Type “A” surfacing lots where the average results of aggregate gradation tests for the lot for the No. 4 (4.75 mm) and No. 40 (0.425 mm) sieves are not more than one-half the allowable tolerance from the job mix target value.

105.03.4 TABLE OF CONTRACTOR SUBMITTALS Page 30 7-31-08

Add the following paragraph after the last paragraph (that begins with “Submit all required…”)

When a specification requires submittal of a form, submit the most current Department form. Forms are available from the Project Manager or on the Department’s Contractor’s system Internet site at http://www.mdt.mt.gov

105.05 COOPERATION BY CONTRACTOR Page 31 3-1-07

Add the following sentence to the end of the third paragraph

This contact must be maintained during all work suspensions, including winter suspension.

Add the following paragraph at the end of Subsection 105.05

Failure to maintain the ability to be contacted within 2 hours during times of work suspension will result in contract time being charged. Time will be charged for the day the Department first attempts to make contact and each additional day that the Contractor’s designated representative cannot be contacted.

105.08.5 SURVEY TOLERANCES AND INSPECTION Page 33 1-31-08

A. Replace the second sentence in part A. Subgrade (that begins with “The 1000 foot …”) and replace with the following:

The 1,000-foot (300-meter) section will be accepted if 80 percent or more of the points checked are within a vertical tolerance range of + 0.05 foot (+15 mm) to - 0.10 foot (- 30 mm), and the horizontal alignment is within 0.30 foot (90 mm) of the true line.

B. Replace the second sentence in part B. Special Borrow (that begins with “The 1000 foot …”) and replace with the following:

The 1,000-foot (300-meter) section will be accepted if 80 percent or more of the points checked are within a vertical tolerance range of + 0.05 foot (+ 15 mm) to - 0.10 foot (- 30 mm), and the horizontal alignment is within 0.30 foot (90 mm) of the true line.

C. Replace the second sentence in part C. Aggregate Surfacing (that begins with “Each 1000 foot …”) and replace with the following:

Each 1,000-foot (300-meter) section will be accepted if 85 percent or more of the points checked are within a vertical tolerance range of + 0.10 foot (30 mm) to - 0.05 foot (- 15 mm), and the horizontal alignment is within 0.30 foot (90 mm) of the true line.

105.13 EQUIPMENT Page 35 10-1-07

Delete Subsection 105.13.

105.15.2 FINAL INSPECTION Page 35 7-3-08

Rescind Subsection 105.15.2 and replace with the following:

Upon notice of completion of all contract work, the Project Manager will arrange to make a final inspection. When all work is complete but deferment of final inspection is necessary for causes outside the Contractor’s control, the Project Manager will issue a suspend work order and contract time charges will cease.

If the contract work is found satisfactorily completed, the inspection will constitute the final inspection. If the inspection discloses unsatisfactory work, the Project Manager will issue written instructions to the Contractor on the necessary corrections. Immediately comply with the instructions. When the deficiencies are corrected, another inspection will be made which constitutes the final inspection.

Upon completion of the final inspection, submit a completed “Contractor’s Final Inspection” (Form CSB105_15_2). The form is available from the Department’s website or the Project Manager. The Contractor’s project superintendent must sign the certification, which must be sworn to and notarized. The certification must state that:

1. The Department and the Contractor have visually inspected the work, and the Contractor verifies that the work was completed in full accordance with the specifications and the requirements of the contract.
2. The Project Closeout Checklist for the General Permit for Storm Water Discharges Associated with Construction Activities (General Storm Water Permit) has been completed, all necessary corrective actions taken and the General Storm Water Permit transferred to the appropriate entity.
3. Liquidated damages have or have not been assessed, and damages that have been assessed either are or are not disputed by the Contractor.
4. The contract does or does not include any specific warranties (non-manufacturer). If it does, include a list with the expiration dates.
5. The Contractor is aware that the Department will not consider the contract for “final acceptance” until the required labor and materials certifications and documentation are complete, and the Contractor has reviewed and agreed to the final estimate.

Contract time will not cease until the Contractor’s Final Inspection has been received and accepted. This is the Substantial Work Complete Date. The Project Manager may suspend contract time for punch list items as long as the roadway is in a condition for the safe and convenient use by the traveling public.

Completion and approval of the Contractor’s Final Inspection is not a statement or commitment by the Department that the work meets the contract requirements, and does not waive or alter any of the contract’s terms. The contract bond will remain in effect until the certificate of completion is executed and the contract is finally accepted by the Commission, plus any time period specified by Montana law.

105.15.3 FINAL ACCEPTANCE Page 36 7-3-08

Rescind Subsection 105.15.3 and replace with the following:

When the final estimate is agreed to by the Contractor under Subsection 109.08, submit a completed “Contractor’s Request and Certification for Acceptance” (Form CSB105_15_3). The form is available from the Department’s website or the Project Manager. An authorized officer of the Contractor must sign the certification, which must be sworn to and notarized. The certification must state that:

1. The work requested for acceptance has been completed in accordance with the contract’s specifications, and the required materials have been used, both in quality and quantity.
2. All construction claims made on the contract have been submitted, and are closed or resolved as of that date.
3. There are no pending investigations referencing alleged nonpayment to subcontractors or suppliers.
4. There are no pending labor compliance or nonpayment claims on the contract.
5. There are no known environmental violations, and the Contractor is responsible for any violations issued for damages prior to the transfer of the General Storm Water Permit.
6. All contract specific warranty periods (non-manufacturer) have expired.

If any of the above is not completed in full before the certification form is submitted, the Project Manager will inform the Contractor that the form is rejected. If the Request for Acceptance form is approved, a Certificate of Completion will be issued within 10 days and the final estimate submitted to Accounting for payment.

The contract is not finally accepted until it is accepted by the Commission, plus any time period specified by Montana law.

105.16.1 NOTICE OF CLAIM Page 36 7-31-08

Rescind the first sentence of the first paragraph (that begins with “Notify the Project Manager …”) and replace with the following:

Submit a notice of claim using the Department’s “Notice of Claim” Form CSB105_16_1A, no later than the next business day of disagreements that are to be the subject of a claim for additional compensation, time extension, contract change, or other remedy.

105.16.3 DECISION ON CLAIMS Page 38 8-6-08

Rescind the second sentence in the second paragraph (that begins with “Submit the …”) and replace with the following:

Submit the “Request for Appeal” Form CSB105_16_3H to the Construction Engineering Services Engineer no more than 30 calendar days after the date of the District Construction Engineer’s decision.

Rescind the fourth sentence in the second paragraph (that begins with “The District Construction Engineer's decision …”) and replace with the following:

The District Construction Engineer's decision is final unless appealed no more than 30 calendar days after the date of the decision.

Delete the third paragraph (that begins with “If the District Construction Engineer …”).

Rescind sixth paragraph (that begins with “The Board may affirm …”) and replace with the following:

The Board may affirm, overrule, or modify, in whole or in part, the decision of the District Construction Engineer. The decision of the Board is the Department’s final decision.

Add the following paragraph after the sixth (last) paragraph (that begins with “The Board may affirm …”)

The Contractor or Department may request non-binding, independent third party mediation. The Contractor’s request for third party mediation must be submitted to the Construction Engineer on the “Request for Mediation” Form CSB105_16_3E no more than 30 calendar days after the date of the Board’s decision. If the Department and Contractor both agree to mediation, they must mutually agree on a mediator and a mediation date within 14 calendar days of the date of the request for mediation. All costs associated with mediation will be shared equally between the Contractor and the Department.

106.01.1 SOURCE OF SUPPLY Page 39 8-1-07

Add the following paragraph after the second paragraph:

Perform sampling of any material to be tested in accordance with the contract. The Department will decide if a sample was taken correctly. Samples not properly taken may be rejected and may not be accepted for testing.

106.02.3 CONTRACTOR-FURNISHED SOURCES Page 40 5-1-08

Rescind the first sentence of the third paragraph (that begins with “The Department will process …”) and replace with the following:

The Department will process and test samples to determine the suitability of the material in accordance with Subsections 701.02.1 and 701.03.1.

Eliminate the fifth paragraph (that begins with “Source approval is based on …”) and rescind parts A, B, C, D, and E.

106.05 FIELD LABORATORY Page 42 3-1-07

Rescind Subsection 106.05 and replace with the following:

The Department will furnish all field offices and laboratories.
Furnish and install electrical power to field offices and laboratories as directed:

- A continuous 200-ampere, 220 to 230 volt, single phase, 60-hertz power supply using a four wire connector; or
- A 110 to 120 volt alternating current of sufficient capacity.

Have the source connected by a Montana licensed electrician.

Furnish a potable water supply to operate all testing equipment for the offices and laboratories at no additional cost to the Department.

106.09 DOMESTIC MATERIALS Page 44 7-3-08

Add the following after the last sentence of the first paragraph:

Submit a request to use a minimal quantity of foreign manufactured steel and iron a minimum of five working days before incorporation into the work. Include in the request the dollar amount of the steel for this request, and the cumulative dollar amount requested to date. Failure to do so will require removal and replacement of all foreign steel and iron with domestic steel and iron. If the foreign steel and iron can not be positively distinguished from any domestic material used, then all of the material must be removed and replaced with domestic steel and iron at the contractor's expense.

107.02 PERMITS, LICENSES, AND TAXES Page 45 7-3-08

Rescind the first paragraph (that begins with "Obtain all …") and replace with the following:

Obtain all legally required permits, authorizations and licenses, pay all charges, fees, taxes, and fuel taxes giving all notices necessary and incidental to the lawful prosecution of the work.

107.06 PUBLIC CONVENIENCE AND SAFETY Page 46 5-1-08

Add the following three pargraphs after the first paragraph (that begins with "Conduct construction with…):

High-visibility safety apparel must be worn by all workers within the right-of-way of all projects. Use high-visibility safety apparel that meets the Performance Class 2 or 3 requirements of the ANSI/ISEA 107-2004 publication entitled "*American National Standard for High-Visibility Safety Apparel and Headwear*".

Workers include all persons on the project at the request of, employed by, or for the benefit of the Contractor. This includes suppliers and subcontractors at every tier including volunteers.

A workers failure to wear required apparel may result in the worker's immediate and permanent ejection from the project, and/or a suspension of work in that area, at the discretion of the Project Manager. No claim for compensation or delay costs may be made by or through the Contractor in such a case.

107.08 LOAD RESTRICTIONS Page 47 8-1-07

Delete the first paragraph (that starts with "Do not exceed legal load …") and replace with the following:

Do not exceed legal load restrictions when hauling material and equipment on public roadways and bridges within and beyond the project limits and on all new and existing portland cement concrete roadways, completed and accepted gravel surfaces, treated base courses, bituminous surfacing lifts and courses, including plant mix base, plant mix surfacing, and seal and cover.

107.08 LOAD RESTRICTIONS Page 47 6-1-06

Rescind the last sentence of the fourth paragraph (that begins with "Furnish a ….") and replace with the following:

Furnish a drawing showing distances between axles, truck tare weight, and the overall length of each truck prior to hauling or placing operations.

Add the following paragraph after the fifth paragraph under Subsection 107.08:

If raising a retractable or tag axle results in the truck being over the maximum legal weight, only raise the axles when backing to unload at a chip spreader, windrow, or plant mix paver. Back the minimum distance possible while over legal weight restrictions. Do not exceed the legal weight on the steering axle by more than 25 percent, or tandem axles by more than 50 percent while backing with the retractable or tag axles lifted.

107.13.1 INSURANCE ON ALL CONTRACTS Page 50 9-1-07

Rescind Subsection 107.13.1 Insurance on All Contracts and replace with the following:

A. Obtain Commercial General Liability insurance with a general aggregate limit of $2,000,000; an occurrence limit of $1,000,000; and products and completed operations limit of $1,000,000. The policy must name the State of Montana, its agents, employees, and officers as an additional named insured

B. Obtain an Owner's and Contractor's Protective (OCP) liability insurance policy for all work to be done, on behalf of the owner (State of Montana, the Department, and its agents, employees and officers) to be submitted with the contract when executed, with a general aggregate limit of not less than $2,000,000 and an occurrence limit of not less than $1,000,000.
C. Both of the above policies must:
   1. Provide coverage on an occurrence basis and not on a claims-made basis;
   2. Not contain exclusions for explosion, collapse, or underground damage hazards;
   3. Provide that all insurance or self insurance maintained by the State, its agents, employees, and officers is in excess of the required insurance and does not contribute with it; and
   4. Meet the timing requirements of Subsection 103.07.

Do not start work until the Department has been furnished evidence that the required insurance has been obtained. Maintain all policies in full force until the contract is complete and accepted and all requirements of Subsection 105.15.2 are met.

Obtain all policies from an insurer with a Best rating of A- or better on the date the policy is written.

The insurance requirements are a condition precedent to the contract. Failure to obtain and maintain all required insurance, or permitting the insurance to lapse before the contract is complete and accepted, is considered a material breach of the contract.

Reinstate the policies listed above if a return to the project is required to complete additional work. Do not begin work until the policies are reinstated and submitted to the Construction Administration Bureau in Helena.

107.17 CONTRACTORS RESPONSIBILITY FOR WORK Page 51 10-9-08

Rescind the second (last) sentence in the first paragraph (that begins with "Protect the work…") and replace with:

Repair all damage to any project work, or the project site, caused by the Contractor or anyone performing any project work at no expense to the Department.

Replace the fourth paragraph (that begins with "The above requirements…") with the following paragraph:

The above requirements do not apply to units or portions of the project that have had a final inspection under Subsection 105.15, other than damage to the project site by either the Contractor or anyone performing project work.

Replace the fifth paragraph (that begins with "Repair of damage…") with the following paragraph:

Provided the damage was not caused by the Contractor or Subcontractor, repair to items that have been accepted as complete is Extra Work under Subsection 104.03 and will be paid for under Subsection 109.04. A building is considered complete when it is fully functional, and is open to the public.

108.01.2 CONTRACT PERFORMANCE Page 57 3-27-08

Rescind the first paragraph (that begins with "Perform at least 40 percent… ") and replace with the following:

Perform at least 40 percent of the original contract cost with the Contractor's organization. The price of items designated in the contract as "Specialty Items" will be subtracted from the original contract price before the amount required to be performed by the Contractor is calculated.

Rescind the first sentence in the second paragraph (that begins with "Where an entire item is subcontracted…") and replace with the following:

Where an entire item is subcontracted, the percentage of the total work subcontracted is based on the original contract item unit price.

Rescind the third paragraph (that begins with "Do not allow a Subcontractor at any …") with the following:

Do not allow a Subcontractor at any contract tier to start work until its subcontract is consented to by the Construction Administration Services Engineer in Helena. Include one fully executed and one copy of the subcontract and a letter from the surety consenting to the subcontract. The subcontractor must possess a current special fuel users permit under 15-70-302 MCA. If the subcontractor does not use special fuel, include a letter stating that the "subcontractor does not use special fuel" with the subcontracts.

Rescind the first sentence of the fifth paragraph (that begins with "Inform the Subcontractor of all the…") with the following:

Inform the Subcontractor of all the contract provisions, and that the Subcontractor is bound by all terms of the prime's contract with the Department.

Rescind the first sentence of the sixth paragraph (that begins with “Attach to each subcontract all required …”and replace with the following:

Attach to each subcontract all required contract provisions, including the FHWA Form 1273 and predetermined minimum wage rates.

108.03.1 GENERAL (PROSECUTION OF WORK) Page 58 3-1-07

Delete the fourth sentence of the third paragraph (that begins with “A pre-construction conference …”) and replace with the following:

Submit a schedule meeting all requirements of Subsection 108.03.2 at or before the preconstruction conference. No other work, except obtaining permits, may begin until the schedule requirements have been met.

108.03.1 GENERAL (PROSECUTION OF WORK) Page 58 1-31-08

Replace the first sentence in the third paragraph (that begins with “A pre-construction conference …”) and replace with the following:

A pre-construction conference will be held on a mutually agreed date between the Contractor, Department and other parties interested in the work before work within the project limits begins no later than twenty days after the Notice to Proceed date.

108.03.2 PROJECT SCHEDULES Page 59 1-31-08

Add the following sentence after the first sentence in the first paragraph:

The initial schedule must show that the work will be completed in the time frame as specified in the contract.

108.03.3 CRITICAL PATH METHOD (CPM) SCHEDULING Page 60 1-31-08

Add the following sentence at the end of the first paragraph:

The initial schedule must show that the work will be completed in the time frame as specified in the contract.

108.07.1 CALENDAR DATE CONTRACTS Page 62 7-3-08

Rescind Part B. under the first paragraph (that begins with “Complete all work …”) and replace with the following:

B. For extra work according to the calendar days added under Subsection 108.07.5

Rescind the second paragraph (that begins with “The new completion …”) and replace with the following:

The new completion date is determined by adding the number of calendar days between the tenth day after bid opening and the award date; the calendar days added under Subsection 108.07.5; or the number of calendar days during authorized suspensions to the specified fixed calendar completion date.

Rescind the third paragraph (that begins with “The actual completion …”) and replace with the following:

The actual completion date is the date the Engineer approves the Final Inspection under Subsection 105.15.3.

108.07.3 WORKING DAY CONTRACTS Page 63 2-19-09

Rescind Parts (1) and (2) under the third paragraph (that begins with “Working days will…”) and replace with the following:

1. At least 60 percent of the daily schedule that could have been worked from April 16 through November 15.
2. At least 60 percent of the daily schedule that was planned to be worked or four hours, whichever is less, from November 16 through April 15.

Rescind and replace the last paragraph (that begins with…”File a written…”) and replace with the following:

Submit a written protest to the Project Manager within the time frame shown on the weekly report for any alleged discrepancies in the time assessed.

108.07.3 WORKING DAY CONTRACTS Page 63 9-1-06

Rescind the first sentence of the fourth paragraph (that begins with “All days worked …”) and replace with the following:

All days worked from November 16 through April 15 that have any impact on the traveling public will be considered a chargeable day except for the following:

108.07.3 WORKING DAY CONTRACTS Page 63 6-1-06

Rescind the seventh paragraph (that begins with “Do not work …”) and replace with the following:

Do not work on holidays, Sundays, or the days described below without the Engineer's approval. Work done on Saturdays, Sundays, and approved holidays will be assessed as working days. Do not work after 12:00 noon on Friday, or on Saturday and Sunday prior to Memorial Day (last Monday in May) and Labor Day (first Monday in September). Do not work after 12:00 noon on Friday, or on Saturday or Sunday prior to Independence Day (July 4) when July 4 is on a Saturday, Sunday or Monday. A working day will not be assessed against the contract for work performed up until 12:00 noon on Friday under the above circumstances.

108.07.3 WORKING DAY CONTRACTS Page 63 3-1-07

Rescind number 2 in the fourth paragraph (that begins with “2. Emergency and maintenance …”) and replace with the following:

2. Emergency and maintenance repairs to the project when the time requirements under Subsection 104.05.2 are met.

Rescind the first sentence of the ninth paragraph (that begins with “Chargeable or non-chargeable …”) and replace with the following:

Chargeable or non-chargeable working days will be determined daily by the Project Manager.

108.07.5 EXTENSIONS (TIME) Page 64 11-1-07

Rescind the second paragraph (that begins with “The contract time as awarded …”) and replace with the following:

The contract time as awarded is based on the estimated quantities as defined in Subsection 102.05. No decrease in contract time will be made for any decrease in a contract item. The contract time may be increased based on the quantity and difficulty of added work and how it impacts the Contractor’s operation as shown on the most current work schedule as required under Subsection 108.03.

The time extension will be to the nearest whole day.

No additional contract time will be allowed for:

A. Increases in percentages of asphalt in plant mix materials.
B. The addition of anti-stripping additives to bituminous materials.
C. The addition of or for increases in hydrated lime or mineral fillers to plant mix materials.
D. Increases in traffic control devices.
E. Delays for slow delivery of materials from the supplier or fabricator.
F. Material deliveries delayed for reasons of late ordering, financial considerations, or other foreseeable and preventable causes within the Contractor's control.

108.08 FAILURE TO COMPLETE ON TIME Page 65 11-1-07

Rescind 108.08 (except for Table 108-1) and replace with the following:

If the contract time is exceeded, including approved adjustments, a daily charge will be made against the contract until the work is substantially complete under Subsection 105.15.2. This daily charge, determined from Table 108-1, will be deducted from any money due the Contractor. This deduction is for liquidated damages for added Department contract administration costs, etc. for failure to complete the work on time.

Permitting the Contractor to continue and complete the work after the specified contract completion time or approved extensions granted does not waive the Department's rights under the contract.

If the Contractor disputes the liquidated damages on the accepted “Contractor’s Final Inspection” form, the Construction Administration Services Bureau will send a final notification in writing to the Contractor of the number of days to be assessed and the dollar amount of the proposed liquidated damages. Submit any objections of the assessment to the Construction Administration Services Bureau in writing within thirty days of receipt of the Department's notification. Include with the objection the justification and all information to support an adjustment to the assessment. The Department will review the Contractor's information and perform a final analysis.

The Commission will review all liquidated damages and any disputes. The Construction Administration Services Bureau will submit the Contractor’s information and the Department's recommendation to the Commission. A copy of the Department’s recommendation will be sent within 45 days of receipt of the objections to the Contractor.

The Contractor must state in writing within fourteen days of receipt of the Department's recommendation if an appearance before the Commission is requested. If an appearance is requested, the Department will notify the Contractor in writing of the date the Commission will review the liquidated damages recommendation. The Commission will not receive or hear new information at the meeting not already furnished in the Contractor's original response.

108.08 FAILURE TO COMPLETE ON TIME Page 66 10-9-08

Rescind Table 108-1 and replace with the following:

TABLE 108-1
SCHEDULE OF LIQUIDATED DAMAGES

ORIGINAL CONTRACT AMOUNT		DAILY CHARGE
From More Than	To and Including	Working Day or Calendar Day
$0	$100,000	$730
$100,000	$500,000	$1,169
$500,000	$1,000,000	$1,598
$1,000,000	$2,000,000	$1,891
$2,000,000	$5,000,000	$2,699
$5,000,000	$10,000,000	$3,355
$10,000,000	—	$4,978

109.04.1 UNIT PRICE OR LUMP SUM BASIS (EXTRA WORK) Page 72 3-1-07

Rescind Subsection 109.04.1 Unit Price or Lump Sum Basis and replace with the following:

109.04.1 Unit Price or Agreed Price

Extra work performed under Subsections 104.02 and 104.03 is paid for at the unit price or price agreed upon and specified in the change order.

Force account basis under 109.04.2 will be used if a change order with an agreed price is not signed by the Contractor.

109.04.2 FORCE ACCOUNT BASIS Page 72 5-1-08

Rescind the first paragraph (that begins with "Approved extra work …") and replace with the following:

Approved extra work paid for on a force account basis will be accounted for daily. The daily report sheets are the true record of extra work. The payments below are full compensation and include profit and overhead. No additional profit will be added. Extra work on a force account basis ordered by the Engineer in writing, under Section 104, is paid for as follows

Rescind the first sentence of the first paragraph in part A (that begins with "The Contractor is paid …") and replace with the following:

The Contractor is paid the wage rates for all labor and foremen assigned exclusively to performing the extra work for the total hours worked plus at least 80 percent of the total.

Add the following sentence after the first sentence in the second paragraph of part A (that begins with "Submit evidence of …"):

Only labor on certified payrolls is eligible.

Rescind the first sentence in Subsection C (that begins with "The Contractor will receive …") and replace with the following:

The Contractor will receive the rental rate or invoice price, where applicable, for machinery or special equipment (other than small tools) used to perform the work plus 10 percent.

Add the following sentence after the second sentence of part D (that begins with "No surcharge is allowed …"):

No payment will be made for additional performance bond premiums if the evidence is not submitted within 30 days of completion of the force account work.

Rescind the second paragraph of Subsection F (that begins with "The inspector will …") and replace with the following:

The Inspector will compile and forward to the Project Manager, at the end of each day, a daily record of extra work done on a force account basis. The Project Manager will forward the information to the Contractor.

109.06 PARTIAL PAYMENTS Page 74 7-3-08

Rescind the first paragraph (that begins with "Partial payments will be made …") and replace with the following:

Partial payments will be made once each month, following the effective date on the Notice To Proceed, based on estimates of the value of the work performed and materials complete in place under the contract, including materials delivered under Subsection 109.07. No payments will be made for work performed or materials produced without the required permits and authorizations in place as required under Subsection 107.02.

109.07 PAYMENT FOR MATERIAL ON HAND Page 75 5-1-08

Rescind Subsection 109.07 and replace with the following:

109.07 STOCKPILED MATERIALS

Materials delivered and stockpiled at the project site or other location approved by the Project Manager may be considered for partial payment, if the following requirements are met:

1. The material meets the contract requirements.
2. The material is a manufactured end product or a fully fabricated product. Aggregate must be produced and stockpiled to the final stage for incorporation into the specified mixture or the roadway. Riprap meeting the gradations specified in Table 701-19 for the class specified in the plans is considered a manufactured end product for this Subsection.
3. Material is stored to prevent damage and theft, without obstructing or impeding the traveling public. Department Inspectors have access to the inventory sheets and the stockpiles at all times.
4. A written request is accompanied by a paid invoice for all items received. Include the quantity for which payment is requested, the length of time the material is to be stored, the location for material stored off the project site, and sufficient detail to justify the costs. If the material is manufactured by the Contractor, include the manufacturing costs in the request.

   Submit a new request and paid invoice to the Project Manager whenever items are added to the stockpile. Clearly identify the project number, location, designation and the entire inventory on these sheets. Keep each project's stockpiled material separated from stockpiles belonging to other projects. Only use stockpiled material for the designated project.

Steel or Iron items meeting Subsection 106.09 may be stored at property owned or leased by the Contractor or approved Subcontractor if approved by the Project Manager. The property must be located in Montana and accessible to Department personnel at all times.

Payment made for material on hand does not constitute acceptance of the material.

If stored material is lost, stolen, or damaged, the material's value will be deducted from the subsequent estimate or estimates.

Payment of partial estimates for stored material, acceptance of the materials to be stored, or approval of the storage method does not relieve the Contractor's responsibility for all materials and work upon which payments have been made or the restoration of any damaged work. The payments are not a waiver by the Department of any other contract provisions or of its rights to require fulfillment of all contract terms.

Partial payment will be made for the invoice price, or for the manufacturing costs incurred by the Contractor. Partial payment will not exceed the contract unit price.

Obtain the Engineer's written approval of off-project site storage locations for bridge prestressed beams, bridge structural steel members, concrete box structures, and other large structural items.

No payment is made for bridge deck re-surfacing materials having a manufacturer's expiration date passing before its scheduled incorporation into the work.

109.08 FINAL ESTIMATE Page 77 11-1-07

Rescind the first two paragraphs of 109.08 and replace with the following two paragraphs:

When the final inspection of the contract is complete under Subsection 105.15.2, the contract documents will be finalized, including a final change order, and a final estimate will be prepared. The estimate will include the amount and value of each class of work performed and any extra work and materials. Deductions for all previous payments and amounts to be deducted or withheld under the provisions of the contract will be made in the final estimate. Errors made in previous partial payments will be corrected in the final estimate.

When the final estimate is complete and all required documentation (e.g., material certifications, labor dispute resolutions, etc.) has been received, the Construction Administration Services Bureau will send a copy of the final estimate to the Contractor for review. The Contractor has thirty days to dispute the final estimate or submit the request for acceptance under Subsection 105.15.3.

109.09.1 GENERAL (MOBILIZATION) Page 77 3-1-07

Add the following number 7 after number 6 in Subsection 109.09.1 General:

7. Submission of all forms, certifications, and documentation required for the Department to prepare the final estimate and issue a certificate of completion.

Add the following paragraph at the end, after number 7:

Mobilization is only to be used for these reasonably-anticipated expenses, and is not to be used either to front-load a bid in order to receive payment earlier, or to unbalance a bid.

109.09.2 PAYMENT (MOBILIZATION) Page 77 3-1-07

Rescind number 1 in the first paragraph and replace with the following:

1. One percent of the original contract amount, but not more than 99 percent of the amount bid for mobilization, will be paid on the first regular estimate period following the notice to proceed.

Delete 100 percent in number 6 of the first paragraph and replace with 99 percent.

Add the following as number 7 after number 6 in the first paragraph:

7. When all forms, certifications, and documentation has been received and accepted, 100 percent of the amount bid for mobilization will be paid.

Delete the last paragraph (that begins with “Nothing in the contract …”) and replace with the following two paragraphs:

The percent that is paid in numbers 1 through 7 above is the cumulative amount paid to that point, not the amount that will be paid on that progress payment.

Payment at the contract unit price is full compensation for all necessary resources to complete the item of work under the contract.

109.10 OVERPAYMENTS Page 78 3-27-08

Replace Subsection 109.10 and replace with the following:

Overpayments on progress estimates will be deducted from subsequent progress estimate payments. If there are no subsequent progress estimate payments to be made, or the amounts to be paid are less than the overpayment, the Department may:

1. Notify the Contractor of the overpayment. The Contractor has 30 days from the date of receipt of notification of overpayment to repay the money owed. If the money owed is not received by the Department before the 30-day period expires, interest will be charged on the overpayment beginning with the date of receipt of notification of overpayment. The interest rate charged will be the average Short Term Investment Pool (STIP) rate, determined by the Montana State Board of Investments, for the period in which the overpayment is not repaid.
   The Contractor may be barred from bidding on Department projects until the money that is owed has been received.
2. The Department may close the project and the amount of overpayment and accrued interest will be deducted from the progress estimate payment of any contract with the Department.

109.11 FUEL PRICE ADJUSTMENT Page 78 10-1-06

Rescind the second Sentence of the second paragraph (that begins with “The base price …”_) and replace with the following:

The base price for the contract will be the average of the high and low price for the five business days before the bid opening.

109.11 FUEL PRICE ADJUSTMENT Page 78 3-1-07

Rescind the fourth sentence of the second paragraph of 109.11 (that begins with “The monthly average price…”) and replace with the following:

The monthly average price will be the average of the high and low prices on Wednesday of each week in the adjustment period taken from Platt’s Oilgram Price Report, or other fuel price report determined by the Department for unleaded gasoline and low sulfur diesel fuel.

202.03.1(B) REMOVAL OF SUBSTRUCTURES Page 85 7-3-08

Rescind Part B. Removal of Substructures and replace with the following:

B. Removal of Substructures. Remove substructures outside of the Q2 elevation, as shown on the plans, to 3 feet (915 mm) below the finished ground surface elevation. Within the Q2 elevation, as shown on the plans, remove or cut off piles and substructures 3 feet (915 mm) below the surveyed thalweg (lowest channel bottom) elevation at the bridge. Shape and contour the removal areas to blend with the surrounding terrain.
Do not damage new work removing existing structures.

202.03.1(C)(2) CONCRETE AND MASONRY Page 85 6-1-06

In the first sentence, delete the words Section 203 and replace with Subsection 202.03.3.

202.03.3 REMOVAL OF PAVEMENT, SIDEWALKS, CURBS, ETC. Page 86 6-1-06

Rescind the title of Subsection 202.02.3 and replace with 202.03.3 Removal of Pavement, Concrete, and Masonry.

Rescind the first sentence of Subsection 202.03.3 (that begins with “Remove and dispose …”) and replace with the following:

Remove and dispose of all existing bituminous or portland cement concrete materials to be removed unless otherwise specified.

Rescind the second paragraph (that begins with “Existing Pavement …”) and replace with the following:

Existing materials used for embankment or base gravel must meet the specifications for the particular item. Process bituminous material to be used as embankment to a maximum 6-inch (150 mm) size in its largest dimension. Process concrete material to a maximum 12-inch (305 mm) size in its largest dimension. Do not place the removed bituminous or concrete material in ephemeral drainages or within 100 feet (30 m) of standing water and groundwater wells.

203 EXCAVATION AND EMBANKMENT Page 87 10-9-08

Rescind Section 203 and replace with the following:

SECTION 203
EXCAVATION AND
EMBANKMENT

203.01 DESCRIPTION

This work is the excavation, placing, compacting and disposal of material encountered within the construction limits necessary to construct the project. This is also referred to as grading.

203.01.1 Excavation

A. Unclassified Excavation. Unclassified excavation is excavating and disposing, when required, of material from the right-of-way or construction easement areas except borrow excavation and muck excavation as defined in Subsection 203.01.1.

B. Borrow Excavation. Borrow for embankment construction is Contractor furnished excavation from outside the right-of-way or construction easement areas.

1. Unclassified Borrow. Use Department approved sources meeting current environmental and cultural resource preservation regulations.
   Material from a Department-optioned or Department-owned borrow source may be available at no cost.
   The applicable provisions of Subsections 102.06 and 106.02 apply to unclassified borrow.
2. Special Borrow. Special borrow-excavation and special borrow-neat line is the providing and placing of the specified quality of borrow material from designated sources or from other approved sources.
   The applicable provisions of Subsection 203.01.1(B) (1) and Subsection 106.02 apply to special borrow-excavation and special borrow-neat line.

C. Unclassified Channel Excavation. Unclassified channel excavation is excavating and disposing of all materials from new watercourses or channels and the widening, deepening, or relocation of existing channels.
D. Street Excavation. Street excavation is excavating and disposal of all material to the street template.
E. Muck Excavation. Muck excavation is removing and disposing of unstable material in cut sections or below the natural ground line in embankment sections.
   Material is considered unstable if:
   1. It contains soil or organic matter unsuitable for foundation material, regardless of moisture content; and
   2. If it cannot be excavated using the same equipment and methods as for unclassified excavation.
   Topsoil removed below the natural ground line in embankment sections is muck excavation if the material is determined unstable and cannot be excavated using the same equipment and methods for unclassified excavation.
   Excavated unstable material areas will be measured before they are backfilled.
   Do not place fill over unstable foundation soils without the Project Manager's approval. Materials placed before approval may be ordered removed and replaced at Contractor expense.
F. Sub-excavation. Sub-excavation is removing unsuitable material from below the plan subgrade elevation as shown or directed.

203.01.2 Embankment

Place and compact excavation in roadway embankments, dikes, areas where unsuitable material is removed, holes, pits, and other roadway depressions. Prepare embankment foundations prior to placing embankment material.

203.02 RESERVED

203.03 CONSTRUCTION REQUIREMENTS

203.03.1 Excavation

A. General. Do not begin grading operations before the area is cleared of vegetation and obstructions under Sections 201 and 202 and erosion controls are placed as specified in the contract.
   Excavate without disturbing material and vegetation outside of the slope limits.
   Use all suitable material removed from the excavation in embankments, subgrade, shoulders, topsoiling, and other designated locations. Excavated material not used as specified or directed is not paid for.
   Sequence excavation of backfill or road finishing material so it is placed into final position as soon as possible. Stockpile suitable material that is not immediately used.
   Construct temporary fencing to restrict livestock and vehicular traffic from the work under Subsection 607.03.5.
   Replace temporarily removed fence and repair damaged fence to a condition equal to the existing fence at Contractor expense. Confine livestock when fencing is disturbed.
   If excavated material from the roadbed is used outside the embankments, furnish and place at Contractor expense, an equal quantity of borrow to replace the material.
   Do not dispose of excess or unusable material within the right-of-way limits unless approved by the Project Manager.
   Compact the top 8 inches (205 mm) of the subgrade in cut sections under Subsection 203.03.3.
B. Rock Blasting.
   1. General. Use and store explosives under Subsection 107.09.
      Use current technology in rock blasting to prevent slides, minimize overbreak, and provide smooth cut slope faces free of loose or fractured rock. Design the ignition sequence and blasting pattern with delays to produce maximum relief to the holes nearest the cut slope face.
      Temporarily suspend blasting operations if the specified slopes are not produced, nearby residences, structures, utilities, or appurtenances are endangered, or the safety and convenience of the traveling public is jeopardized by fly rock, fragmentation, vibration, air blast, or overbreak.
   2. Blasting Plan. Submit the blasting plan before drilling and blasting operations begin and when there is a change in the proposed drilling and blasting methods. Submit the blasting plan on form CSN-55, available from the Project Manager, with the following information:
      a. Station limits of proposed blast;
      b. Plan of proposed drill hole and delay pattern including free face, burden, and spacing; and
      c. Report of hole depth, diameter, burden, spacing, stemming, explosive types, powder factor, and delays.
      The blasting plan is to reflect a blast design that provides for the proper drilling and blasting procedures to produce the specified results.
      Revise the drilling and blasting methods as necessary to produce the specified results.

3. Scaling. Scale all loose or detached rock and soil masses that create a potentially dangerous situation to the work, workers, or the public. Remove the rock by barring, wedging, equipment, or using light explosive charges. Scale during or after each lift is completed. Scaling and disposing of the scaled materials is incidental to unclassified excavation.
4. Pre-splitting Rock Slopes.
   a. General. Pre-split rock cuts to a smooth plane using loaded, timed, and spaced drill holes.
      Produce a continuous or semi-continuous fracture between drill holes and a stable rock cut by eliminating overbreak in the backslope during primary blasting. Detonate pre-split holes before detonating the production holes.
   b. Drilling. Use drills equipped with mechanical devices that accurately determine the angle the drill steel enters the rock. Do not drill if the devices are missing or inoperative.
      Remove overburden soil and loose or decomposed rock along the top of the excavation to produce a smooth rock surface for drilling.
      Use pre-split hole diameters that are between 2 1/2 inches (64 mm) and 3 inches (75 mm). Drill pre-split holes within 3 inches (75 mm) of the staked collar location. Holes drilled outside the 3-inch (75 mm) tolerance will be rejected and not measured for payment. Drill hole intervals may vary between 24 inches (610 mm) and 36 inches (915 mm). A 30-inch (765 mm) interval is used to estimate the measurement of pre-split contract quantities.
      When the cut height exceeds 30 feet (10 m), an offset from the staked slope line, not to exceed 2 feet (610 mm) is allowed at the top of each lift after the top lift. The actual slope cannot deviate from the plan slope by more than 2 feet (610 mm).
      Control the drilling operations to insure that no hole deviates from the slope plane by more than 9 inches (230 mm) parallel or normal to the slope. Pre-split holes exceeding these limits will not be paid for.
      Drilling 2 feet (610 mm) below ditch bottom to aid removing the toe berm is permitted.
      Extend pre-split holes a minimum of 30 feet (9.2 m) beyond the limits of the production holes or to the end of the cut.
      Maintain the length of pre-split holes for any individual lift at no more than 30 feet (9.2 m). The Project Manager may approve a written request to increase the hole length to a maximum of 60 feet (18.3 m) if it is demonstrated that the above pre-split hole tolerances and a uniform slope can be obtained. If over five percent of the pre-split holes are misaligned in any one lift, reduce the lift heights until the 9-inch (230 mm) tolerance is met.
   c. Blasting. Verify that the drill holes are free of obstructions for their entire depth before placing charges. Take precautions to prevent material from entering the drill holes while placing the charges.
      Drill hole conditions may vary from dry to water filled. Use the type or types of explosives and blasting accessories for the conditions encountered following the manufacturer's recommendations.
      Use explosives with a maximum diameter no more than one-half the diameter of the pre-split hole. Do not use bulk ammonium nitrate and fuel oil in the pre-split holes. Use only standard explosives manufactured specifically for pre-splitting.
      If fractional portions of standard explosive cartridges are used, firmly affix them to the detonating cord to prevent the cartridges from slipping down the cord or bridging across the hole. Space fractional cartridges along the length of the detonating cord at maximum 30-inch (765 mm) centers and adjust spacing to produce the specified results.
      Assemble and affix continuous column cartridge type explosives to the detonating cord following the explosive manufacturer's instructions. Furnish the Project Manager these instructions 24 hours before blasting begins.
      The pre-split hole bottom charge may be larger than the line charges if it does not cause overbreak. Reduce the top charge of the pre-split hole and place it far enough below the collar to avoid overbreak and heaving.
      Stem the upper 3 feet (915 mm) of all pre-split holes below the hole collar with sand or other dry, angular granular material passing a 3/8-inch (9.5 mm) sieve.
      The Contractor may pre-split the slope face before production drilling or pre-split the slope face and production blast at the same time, if the pre-split drill holes are fired simultaneously at least 100 milliseconds before the production blast. Do not delay pre-split holes more than 25 milliseconds, hole to hole, to reduce noise and ground vibration.
      Do not vary the pre-split slope face by more than 1 foot (305 mm), measured perpendicular to the slope, from a plane passing through adjacent drill holes unless otherwise directed.
5. Production Blasting. Drill the row of production blast holes adjacent to the pre-split blast line on a plane parallel to and no closer than 6 feet (1.8 m) to the pre-split blast lines. Do not drill the production hole bottoms lower than the pre-split hole bottoms and with a diameter not greater than 6 inches (155 mm).
   Detonate production holes on a delay sequence toward a free face.
   Stem production holes a minimum of 3 feet (915 mm) or 0.7 times the burden distance, whichever is greater, with sand or other dry, angular granular material passing a 3/8-inch (9.5 mm) sieve.
   Perform production blasting to minimize blast damage to the backslope.
   Production blasting is incidental to and included in the measurement and payment for unclassified excavation.

C. Rock Excavated Below Grade. Excavate all un-yielding materials that require blasting or the use of rippers to at least 6-inches (155 mm) below subgrade within the roadbed limits. Backfill the excavation with specified or approved material. Remove or drain surface rock pockets that trap or pond water.

Rock, removed to a maximum depth of 6 inches (155 mm) below subgrade is measured and paid for as unclassified excavation. Rock removed or backfilling due to over excavating in excess of the 6 inches (155 mm) with approved backfill material is at Contractor expense.

D. Removing Excess Moisture. Rework materials from excavation or borrow areas exceeding two percent of optimum moisture to the specified optimum moisture before use in embankments or as backfill. Costs to remove excess moisture from the material is incidental to the embankment.

Remove excess moisture in the finished roadbed soil, introduced or caused by construction operations, for re-use in the work at Contractor expense. Excessively wet material, caused by the construction operations that cannot be properly compacted must be removed and replaced with suitable material at Contractor expense.

E. Borrow Material. Excluding special borrow, borrow material may be used only after the roadway excavation has been placed in the embankment. If excess borrow is placed creating a waste of excavation, the waste quantity will be deducted from the measured volume in the borrow area.

Provide the Project Manager five calendar days notice before excavating material from the borrow area so that the area may be surveyed. Do not excavate beyond the dimensions and elevations established for the borrow areas. Finish and shape all borrow areas to permit accurate measurements. Reclaim borrow areas meeting Subsection 106.02.5 requirements

F. Roughen Slopes. Roughen slopes as directed.

203.03.2 Embankment

A. General. Do not place stumps, trees, logs, rubbish, vegetation, muck, frozen material, pockets of rock, volcanic ash or other deleterious materials in embankments.

Sod mixed with surface soil and soil containing excessive humus or other organic materials may be spread over the top of embankment slopes Compact embankment, backfill, and embankment foundation areas under Subsection 203.03.3.

Leave the surface of completed embankments in a roughened condition.

B. Embankment at Structures. Do not place rocks, broken concrete, or other solid material in areas where piling is to be driven.

Do not place embankment against any backwall or abutment until the concrete has cured for 10 days or has reached 70 percent of the required strength. Furnish a certified laboratory test report showing the field-cured cylinders meet the required strengths.

The Project Manager may approve early embankment work at backwalls or abutments with beams or girders in place, or that are cantilevered from a fixed footing or cap if the strength requirement is met.

Do not place embankment against un-supported backwalls or U-shaped abutments rigidly connected to the deck until the deck is placed and cured meeting the applicable requirements of Section 552.

The Contractor may submit a method of supporting the structure to permit early placement of embankment against the structure. If approved, all costs of the alternate method are at Contractor expense.

Place embankment in 8-inch (205 mm) maximum layers loose thickness and compact adjacent to structures, around columns and similar structural supports, and on both sides of concrete walls, box type structures, and similar structures. Extend embankment material placed above the excavation limits or ground line a minimum 10 feet (3 m) from the structure or structural support.

Restore, repair, or replace structures or structural members moved or distorted by placing and compacting embankment at Contractor expense.

Compact embankment inaccessible to rollers by mechanical tampers to the density specified in Subsection 203.03.3.

Before placing and compacting backfill, compact at least the top 8 inches (205 mm) of the existing ground under Subsection 203.03.3.

C. Preparation of Embankment Foundations. Bench all embankments placed and compacted on hillsides, against existing embankments, built one-half width at a time, or on slopes 6:1 or steeper when measured at right angles to the roadway centerline. Construct benches in minimum 4-foot (1.2 m) widths. Maintain the horizontal inclination within 5 percent of horizontal. Backfill and compact each bench in maximum 8-inch (205 mm) layers.

Excavate each bench as close to each other as the slope permits. Use approved material excavated from benches in the embankment.

In excavation to embankment transitions where the natural ground slope exceeds 6:1, construct the excavated benches so the natural ground surface is a minimum 12 inches (305 mm) from the top of the subgrade.

Remove frozen earth, snow and ice from the cut or embankment surface and place it outside the slope stakes. Provide the replacement borrow material at no cost to the Department.

Clear the full width of the subgrade of sod and vegetative matter. Scarify the top 8 inches (205 mm) of the embankment foundation and compact under Subsection 203.03.3 before constructing embankments 4 feet (1.2 m) high or less, or embankments placed on soils having less than 95 percent maximum density, determined by MT-210.

If original lightly compacted soils are encountered that exceed 8 inches (205 mm) in depth, remove it to the depth directed. Compact the upper 8 inches (205 mm) of the ground under Subsection 203.03.3. Place the removed material in the embankment or use it for topsoil as directed. Material useable as topsoil may be placed alongside the roadway after compaction is completed.

D. Earth Embankment. Place earth roadway embankment in uniform horizontal layers not exceeding 8 inches (205 mm) loose measurement and compact under Subsection 203.03.3. Continuously level, work, and maintain moisture to compact to the specified density. Uniformly work the entire surface of each layer.

Work each layer of earth embankment using a tandem type construction disk with a maximum disk spacing of 14 inches (355 mm) and a minimum worn disk diameter of 25 inches (635 mm). Larger disks may be used if the ratio of disk spacing to disk size is comparable to the above dimensions. Leave the embankment slopes in a roughened condition.

E. Rock Embankment. When the excavated material contains more than 25 percent rock by volume, 6 inches or larger (155 mm) in its greatest dimension, place the embankment in layers 2 inches (50 mm) thicker than the maximum size rock in the material not to exceed 24 inches (610 mm) loose thickness.

Individual rocks and boulders larger than 24 inches (610 mm) in diameter may be placed in the embankment if the rocks do not exceed 48 inches (1.2 m) vertical height after placement, are evenly distributed, and are spaced to allow placing and compacting of the soil in between the rocks.

Place and compact the upper 2 feet (610 mm) of the embankment in maximum 8-inch (205 mm) layers loose thickness as specified in Subsection 203.03.2(D).

Dump and work rock from excavations to the stream face when the embankments are adjacent to streams or channels. Prevent the rock from entering the stream. This work is incidental to unclassified excavation.

F. Embankment Over Swampy Areas. On low, swampy ground incapable of supporting haul equipment, construct the lower part of the embankment by dumping successive loads of uniformly distributed material in layers thick enough to support the equipment. Place subsequent layers under Subsection 203.03.2 (D) or (E) as directed.

G. Disposal of Unsuitable or Excess Material. If disposal of excess or unusable excavation within the right-of-way limits is approved by the Project Manager, slope and shape all disposal areas to blend into the surrounding terrain and meet the requirements of Subsections 106.02.5 and 107.11.

203.03.3 Moisture and Density Requirements

Compact each layer of material to the in-place density requirements of Table 203-1 for the method of moisture and density control used. The moisture and density control is the Proctor method or the Zero Air Voids method, determined by the Project Manager.

If proctors are used for density control, the Contractor may make a written request to the Project Manager to compact the soils at a lower moisture content. Identify the soil class in the request. The Project Manager may approve the request provided a Department investigation determines the lower moisture content is not detrimental to the soil for the given application. For A-1 material in embankments, MT 218 and MT 230 tests will be used.

Compact rock embankments that cannot be tested by Montana Test Methods MT-212, MT-215, and MT-218 (Proctor Method) or MT-229 (Zero Air Voids Method) with compaction equipment and hauling and spreading equipment. Use grid rollers, pneumatic-tired rollers, vibrating rollers, vibrating compactors, or self-propelled tamping rollers. Do not use sheepsfoot rollers unless approved. Use water as required.

TABLE 203-1
COMPACTION REQUIREMENTS

COMPACTION CONTROL METHOD		
Material Compacted	Proctor	Zero Air Voids
	Test Methods: MT-210, MT-230, MT-212, MT-215, MT-218	Test Method: MT-229
Earth Embankment Including All Backfills Top 8 Inches (205 mm) of Subgrade in Cut Sections Culvert Foundations Top 8 Inches (205 mm) of Embankment Foundations Backfill Foundations	Minimum 95% of Maximum Density at Optimum Moisture ± 2%	Less than 10% Air-filled Voids

203.03.4 Sloping and Finishing

A. Sloping. Finish and shape all cut slopes, ditches, embankments, and structure berms to a uniform, rough textured surface. Scarify smooth slopes.

Conduct slope roughening in accordance with the plans and Detailed Drawings. Slope roughening is a part of slope construction and is not measured for payment.

Where roadway slopes are not completed to the planned or directed lines and the material from the backslope erodes, sloughs, or slides due to incomplete erosion control measures or the Contractor's operations, the removal of the material and restoration of the slope is at Contractor expense.

Where roadway slopes are completed to the plan or directed lines, all required erosion control devices are in place as specified, and the material from the completed slopes erode, slough, or slide onto the roadbed before acceptance of the work, through no fault of the Contractor, the removing of the slide material, potential slide material, and the drainage excavation is paid for at an agreed unit price or on a force account basis under Subsection 109.04.

When directed, widen cuts and flatten slopes to obtain additional excavation for embankments or to increase slope stability. The Project Manager may steepen stable rock slopes. This work is measured and paid for under the grading item unless it requires non-contract construction methods increasing costs that are considered extra work under Subsection 104.03.

B. Finishing. Finish the entire roadbed to the final elevations specified.

203.03.5 Maintenance of Constructed Roadway

Maintain the roadway during construction so it is continuously well drained.

Prevent erosion damage to embankments and stream siltation under Section 208. Keep all drainage ditches and structures open and free from debris until the final inspection is approved.

If grading work is suspended, blade smooth and grade the entire roadway area to prevent water from collecting or ponding on the roadway. Maintain the roadway during suspension periods to the specified grade and cross section at Contractor expense.

Maintain erosion and siltation control devices meeting the contract requirements at all times.

203.03.6 Topsoil - Salvaging and Placing

Remove sufficient amounts of topsoil from the excavation and embankment foundations to ensure replacement quantities are available to cover all disturbed areas with four inches (100 mm) of topsoil.

Place topsoil on the completed graded roadway to the lines, grades, and elevations specified.

Unless directed by the Project Manager, place topsoil on all slopes, excluding slopes 2:1 or steeper. Place topsoil to an average 4-inch (100 mm) loose depth on the base course surfacing inslope. Uniformly spread what is available over the remainder of the disturbed areas. Finish the disturbed areas in accordance with the requirements of Subsection 610.03.2.

Stockpile topsoil at acceptable selected locations within the right-of-way. When construction operations do not permit stockpiling within the right-of-way, make arrangements for stockpile sites outside the right-of-way at no additional cost to the Department.

Construct stockpiles so drainage is maintained and topsoil is easily reclaimed. Provide erosion controls following best management practice.

In the event that construction sequencing prevents replacement of topsoil over all disturbed areas prior to final paving, reserve adequate quantities to cover the exposed base course surfacing inslope as shown in the Detailed Drawings.

203.04 METHOD OF MEASUREMENT

203.04.1 Excavation

The quantities of unclassified excavation, unclassified borrow excavation, special borrow-excavation, unclassified channel excavation, street excavation, sub-excavation, and muck excavation are measured for payment in cubic yards (cubic meters) as surveyed or calculated under Subsection 109.01.

The Department will provide the initial measurement at no charge for the following specific work areas:

1. In slide areas determined by the Department not to be the fault of the Contractor;
2. In excavated areas authorized by the Project Manager, outside the staked lines and grades; and
3. In un-staked areas such as borrow areas, muck excavations, sub-excavations, and un-staked excavations authorized by the Project Manager.

These areas of excavation and borrow are measured in their original position under Subsection 109.01. Disposal of excess or unusable excavation is not measured for payment.

The quantities of special borrow-neat line for payment are calculated in its final position under Subsection 109.01 with no allowance for shrink or swell.

Either the Department or the Contractor may request re-measurement of specific work areas, or the entire project, if there is disagreement over the accuracy of quantities computed from the staked lines and grades. The party requesting the re-measurement is responsible for all costs associated with the re-measurement. Department staff may perform the re-measurement, in which case, the rate for determining the costs for performing the work are based upon the original contract amount, and the daily charge established in Subsection 108.08, Table 108-1. An independent third party acceptable to the District Construction Engineer, and under the direction of a professional land surveyor registered in Montana, may also be used to perform the re-measurement.

Excavation is eligible for a second payment under the following conditions:

1. A second handling is required;
2. The excavated material meets all the contract requirements for the second usage;
3. The second payment item quantity is calculated in-place in its final disposition, or computed from plan dimensions. Items that require a second field measurement, such as special borrow-excavation, are not eligible for a second payment;
4. The contractor makes up any shortfall in excavation, at no cost to the Department, caused by the second use. The material making up the shortfall is subject to approval by the Project Manager; and
5. The contractor is responsible for the haul, balance lengths, balance points or other foreseen or unforeseen project constraints. No payment will be made for any additional costs.

Authorized excavation of rock, shale, muck, or unsuitable material below grade necessary to provide the designed thickness of backfill is measured for payment. If the designated bottom plane of the excavation falls within a layer of rock, the below-grade excavation to the bottom of the layer, not exceeding 6 inches (150 mm) below grade, is considered authorized and is measured for payment.

Rock excavation exceeding 6 inches (150 mm) below grade is not measured for payment. If the nature of the material, the thickness of the layers or strata, and method of operations make it practical to excavate only to the plan depth, any material removed below plan depth is not measured.

Measurements are made for unusable materials excavated and removed.

Useable material temporarily removed and replaced for Contractor convenience is not measured for payment.

Removal and disposal of unusable materials from borrow areas is not measured for payment. Special borrow removed from areas before surveying is not measured for payment.

The actual quantities of plan and approved sub-excavation are measured and added to the quantities of unclassified excavation for payment.

Material authorized for removal that cannot be excavated by the methods used for the unclassified excavation is measured and paid for as muck excavation.

Muck excavation reworked under Subsection 203.03.1(D) is measured and paid for as unclassified excavation for the second handling.

When the contract does not contain a bid item for muck excavation and an area is determined unstable under Subsection 203.01.1(E), the muck excavation quantity is measured and paid for at an agreed price or force account basis under Subsection 109.04. Measurement and payment for muck excavation at the agreed price includes all excavating and hauling, disposing of all stumps, logs, and other debris encountered in the excavation, all pumping and de-watering required, and finishing of the planned disposal areas.

Unclassified excavation allowed for pre-split drill equipment clearance is calculated from the area bounded by the plan slope and lines parallel to plan slope, offset 2 feet (610 mm) for each 50-foot (15.2 m) increment in vertical cut height. The quantity for drill equipment clearance where the cut slope height is less than 50 feet (15.2 m) is not measured for payment.

Excavation used as select or stockpiled select material is measured by the cubic meter in its original position.

Removed and placed stockpile material is measured using the volume in its original excavated position.

Channel excavation is measured and paid for as unclassified channel excavation.

Street excavation is measured and paid for as unclassified excavation unless the contract has street excavation as a bid item. Disposal of material or other items within the limits of the street excavation are not measured for payment.

203.04.2 Drill Pre-splitting Holes

Drill pre-splitting holes are measured by the foot (meter). The measurement is made from the rock surface to the roadway grade or to a predetermined bench elevation. The quantity of drill pre-splitting holes shown in the contract is not guaranteed, and the Department reserves the right to increase or decrease this item with no adjustment in the contract unit price.

203.04.3 Embankment in Place

The embankment quantities measured in cubic yards (cubic meters) for payment as Embankment In Place include the following:

1. The actual quantities of roadway embankment measured, above the original ground line under Subsection 109.01, with no volume adjustments made for shrinkage, compaction, or subsidence.
2. The topsoil replacement quantity, measured in the topsoil stockpiles.
3. Excavation of unusable material and sub-excavation in the contract or directed by the Project Manager in its original position.

203.04.4 Compaction

Work and materials to compact embankment material and backfill to the specified density is not measured for payment.

203.04.5 Topsoil

Excavation of topsoil material from its original position, loading, hauling, stockpiling, and removal from the stockpile and spreading on the designated areas is measured for payment by the cubic yard (cubic meter) in the stockpile before final placement.

Before measurement, shape and smooth each stockpile into the smallest practical area. Haul is not measured for payment.

Topsoil removed from cut areas is not deducted from the grading quantities.

Measurement is made as if the topsoil had not been removed.

Topsoil removed from embankment areas and from borrow areas, excluding Contractor-optioned under Section 106, is measured under the bid item Topsoil - Salvaging and Placing.

203.05 BASIS OF PAYMENT

Payment for the completed and accepted quantities is made under the following:

Pay Item	Pay Unit
Unclassified Excavation	Cubic Yard (cubic meter)
Unclassified Borrow Excavation	Cubic Yard (cubic meter)
Special Borrow	Cubic Yard (cubic meter)
Unclassified Channel Excavation	Cubic Yard (cubic meter)
Digout Excavation	Cubic Yard (cubic meter)
Muck Excavation	Cubic Yard (cubic meter)
Drill Pre-splitting Holes	Foot (meter)
Embankment in Place	Cubic Yard (cubic Meter)
Topsoil - Salvaging and Placement	Cubic Yard (cubic meter)
Street Excavation	Cubic Yard (cubic meter)

Payment at the contract unit prices is full compensation for all resources necessary to complete these items of work under the contract.

208.03.6 INSPECTIONS (GENERAL STORM WATER PERMITS) Page 108 10-9-08

Rescind section 208.03.6 and replace with the following:

Conduct inspections of BMP's according to the MPDES/NPDES and the associated General Permit for Storm Water Discharges Associated with Construction Activity. Provide one copy of the signed Storm Water Pollution Prevention Plan (SWPPP) inspection report to the Project Manager.

- On the 1st and 15th of each month when the SWPPP requires inspection every 14 days;
- On the 15th of the month when the SWPPP requires inspection monthly;
- Within three calendar days of a storm event of 0.5 inches or greater that requires an inspection within 24 hours.

Use the most current version of the Department's inspection form, CSB208_03_6 when the Department and the Contractor are co-permittees. Use the Department's form or another form that conforms to the requirements of the General Storm Water Discharge Permit when the Contractor is the sole permit holder.

Failure to conduct BMP inspections and submit inspection reports renders the BMP's unacceptable. No payment will be made for BMP's installed and the total paid to date on progress estimates for BMP's will be deducted on the next monthly progress estimate until the inspection reports are completed and received by the Project Manager.

Repair or replace damaged, inadequate, non-functioning or non-conforming devices or BMPs.

Immediately report potential noncompliance in accordance with applicable regulations, guidance, and permit conditions. The Contractor is wholly responsible for all violations including but not limited to those that result during the times when no inspections are conducted, inspection report forms are not submitted, or required maintenance of BMP's is not performed.

208.05 BASIS OF PAYMENT (TEMPORARY EROSION CONTROL) Page 108 1-31-08

Add the following paragraph after the second paragraph.

Payment for completed and accepted temporary erosion/sediment control devices will be made under one of the following two categories:

1. Category #1 – New Installation. When a device is new and used for the first time it will be paid at 100 percent of the rate schedule.
2. Category #2 – Reuse. When a previously used BMP material that meets contract specifications is placed in a new location it will be paid at 75 percent of the rate schedule.

301.03.1(B) ACCEPTANCE SAMPLING AND TESTING (AGGREGATE SURFACING) Page 123 1-15-09

Rescind third paragraph (that begins with "The largest quantity …")

301.03.1(B) ACCEPTANCE SAMPLING AND TESTING (AGGREGATE SURFACING) Page 123 7-31-08

Rescind the first Sentence (that begins with "The Project Manager will …") and replace with the following:

The Project Manager will randomly select samples taken by the Contractor and witnessed by an Inspector, for gradation and fracture testing from processed material in its final position on the roadway under MT-201. Samples for other tests will be taken at the point of production.

301.03.1(B) ACCEPTANCE SAMPLING AND TESTING (AGGREGATE SURFACING) Page 123 10-1-06

Delete "Cleanness Value ……. MT-228" as an acceptance test.

301.03.1(C) ACCEPTANCE (AGGREGATE SURFACING) Page 124 10-1-06

Rescind the first paragraph and replace with the following:

C. Acceptance. Surfacing aggregates are evaluated for gradation and mechanical fracture on a lot-by-lot basis. The upper and lower limits in the gradation tables in Section 701 are the upper and lower limits in the evaluation formulas. The specified minimum fracture is the lower limit.

301.03.5(D) COMPACTION (AGGREGATE SURFACING CONSTRUCTION) Page 126 1-31-08

Remove "MT-210" from the last sentence (that begins with "Densities will be determined …").

304.02.1 PORTLAND CEMENT Page 135 3-1-07

Rescind Subsection 304.02.1 and replace with the following:

Use Portland cement meeting AASHTO M85 or ASTM C150, Type I or Type II requirements. Blended hydraulic cement that conforms to one of the following may be substituted:

- ASTM C595 Type IP or Type IP(MS)
- ASTM C1157 Type GU or Type MS

401.03.10 SPREADING AND FINISHING Page 152 3-1-07

Delete the third paragraph (that begins with "Place plant mix surfacing…").

401.03.11 CONSTRUCTING JOINTS Page 153 3-1-07

Rescind the second sentence of the fourth paragraph (that begins with "If these locations …") and replace with the following:

Obtain approval from the Project Manager to construct the joint at any other location.

Add the following paragraph after the sixth paragraph:

It is preferred that exposed longitudinal joints between driving lanes be avoided by constructing abutting passes equally by the end of paving each day. If an exposed longitudinal joint remaining at the end of a day's paving is not located outside of the temporary driving lines to be occupied by traffic, delineate and sign the exposed joint at no additional cost to the Department. Obtain the Project Manager's prior approval of the delineation and signing.

401.03.12(A) COMPACTION Page 153 1-31-08

Remove the second paragraph (that begins with "Complete compaction rolling …") and replace with the following:

Complete compaction rolling within the temperature range recommended by the asphalt binder supplier included in the mix design. Suspend paving operations when compaction rolling damages the new pavement

402.03.5 ACCEPTANCE Page 158 12-27-07

Delete part B, "Asphalt Cement Penetration (Quality Assurance)".
Delete part C, "Failures Other Than Asphalt Cement Penetration (Non-quality Assurance)".

407.02.1 BITUMINOUS MATERIAL Page 169 3-1-07

Delete the fourth paragraph (that begins with "The Contractor may …") and replace with the following:

The Contractor may substitute CSS-1, CSS-1h, or SS-1h emulsified asphalt for SS-1 emulsified asphalt for tack coat.

409.01.1 CONTRACT TIME Page 171 7-3-08

Add the following after the last sentence of the third paragraph (which begins with "Time charges according…")

In cases where seal coat and pavement marking application are the only remaining items of work as of August 21, contract time will not be charged after August 20 if seal coat work is not performed. Contract time will be charged according to Subsection 108.07.3, beginning on the day seal coat work begins, from August 21 through August 31 if seal coat work is performed.

Submit written notice to perform seal coat work from August 21 through August 31.

409.03.3 SEASONAL AND WEATHER LIMITATIONS (SEAL COAT) Page 172 12-18-08

Rescind Subsection 409.03.3 and replace with the following:

409.03.3 Seal Coat Limitations
The following conditions govern seal coat work:
1. Perform seal coat operations between May 1 and August 31.
2. Do not perform seal coat work during the 48-hour period immediately preceding a holiday or a holiday weekend except for pilot car operation as specified in Subsection 618.03.11.

3. Perform seal coat work when both the ambient and pavement surface temperatures meet the bituminous material supplier's recommended temperatures.
4. Stop seal coat work at least 1/2 hour before sunset, to include equipment off of the roadway and placement of traffic control devices for non-construction activities.
5. Do not apply bituminous material to damp or wet roadway surfaces.

409.03.6 APPLICATION OF FOG SEAL Page 173 7-31-08

Rescind the first Sentence (that begins with "Apply a fog seal …") and replace with the following:

Apply a fog seal using SS-1 or CSS-1 emulsions meeting subsection 402.03.6 requirements, on Grade S and Commercial Mix plant mix surfaces prior to application of seal coat materials when paving and seal coat work are performed the same calendar year.

Rescind the second sentence (that begins with "Dilute fog seal …") and replace with the following:

Dilute fog seal emulsions at a rate of one part emulsion to one part water.

409.03.6 APPLICATION OF FOG SEAL Page 173 9-1-07

Rescind the first sentence (that begins with "The Contractor may…") and replace with the following:

Apply a fog seal using SS-1 or CSS-1 emulsions meeting Subsection 402.03.6 requirements, on Grade S and Grade D plant mix surfaces prior to application of seal coat materials when paving and seal coat work are performed the same calendar year. Dilute fog seal emulsions at a rate of one part emulsion to one part water at the point of manufacture.

409.03.7 APPLICATION OF SEAL COAT MATERIALS Page 173 3-1-07

Rescind the third sentence of the second paragraph (that begins with "Locate longitudinal …") and replace with the following two sentences:

Locate longitudinal joints at the centerline or lane line. Obtain approval from the Project Manager to construct the joint at any other location.

409.03.8 WARRANTY (SEAL COAT) Page 173 7-31-08

Rescind 409.03.8 and replace with:

The Contractor warrants the seal coat work. If the seal coat experiences chip loss, tracking, flushing or bleeding, at any time between the date the seal coat is completed and the first Wednesday in December of the same calendar year, perform repairs to the seal coat, and replace pavement markings covered by the repairs at no additional cost to the Department. Areas of cover material loss determined to result from means beyond the Contractor's control (snow plow damage, tire chain damage, or others) are not considered under these warranty requirements. Final determination regarding cover material loss will be made by the Engineer. When repairs are deemed necessary, reference is made to the "MDT Seal Coat Warranty Administration Guide." Submit a detailed repair plan to the Project Manager for approval within 14 calendar days of notification of required repairs. Make warranty repairs in accordance with the provisions of this specification. When performing warranty work, furnish traffic control meeting Section 618 requirements at no additional cost to the Department.

551.03.2 DESIGN (COMPOSITION OF CONCRETE) Page 200 7-3-08

Rescind the first Sentence of Number 4 Part (d) (that begins with "Ground granulated …") and replace with the following:

d. Ground granulated blast furnace slag may be included in the mix design for up to 25 percent by weight of the total cementitious material.

551.03.7(A)(4) FLOWABLE FILL (TESTING AND ACCEPTANCE OF CONCRETE) Page 208 3-1-07

Add the following paragraph at the end of Subsection 551.03.7 (A) (4) Flowable Fill:

Cover the flowable fill trench with steel plates of sufficient thickness to hold traffic if the trenched area is opened to traffic prior to meeting the required strength listed in part b) above. Anchor the plates to prevent movement from traffic.

552.03.9(A) GENERAL (COLD WEATHER CONCRETING) Page 218 3-27-08

Rescind the first sentence (that begins with “Assume all…”) and replace with the following:

A. General. Assume all risk for placement and cure of concrete during cold weather.

555.03.3 PLACING AND FASTENING (REINFORCING STEEL) Page 246 9-1-06

Rescind the tenth paragraph (that begins with “Use plastic-coated …”) and replace with the following:

Use plastic-coated tie wires or tie wires coated with another inert coating approved by the Engineer to tie the coated bars in place.

556.03.1 PRE-QUALIFICATION Page 249 7-3-08

Rescind 556.03.1 Pre-qualification and replace with the following:

556.03.1 Pre-qualification for steel fabricators

Use metal fabricators that are pre-qualified under the AISC Quality Certification Program for the items listed below. Items not listed may be fabricated by non-certified shops.

AISC has quality certification in the following categories:

- Conventional Steel Building Structures (SBD). The certification is typically specified for small public service and institutional buildings (schools, etc.), shopping centers, light manufacturing plants, miscellaneous and ornamental iron work, warehouses, low rise beam/column/light truss structures.
- Simple Steel Bridge Structures (SBR). The certification is typically specified for unspliced rolled beam bridges.
- Complex Steel Building Structures (CBD). The certification is typically specified for high-rise buildings, large public service and institutional buildings, heavy manufacturing plants, powerhouses, and petro/chemical processing facilities.
- Major Steel Bridges (CBR). The certification is typically specified for large span bridges. Main members are typically fabricated girders that must be spliced with a welded or bolted connection.

A. Certification Requirements

Use fabricators having Category CBR certification to fabricate the following:

1. Fracture critical members and attachments. Fabricators must have the Fracture Critical Endorsement (F).
2. Main members, (including spliced rolled beams).
3. Welded floor beams.
4. Diaphragms for horizontally curved girders.

Use fabricators having Category SBR certification to fabricate the following:

1. Non-spliced rolled beams.
2. Non-spliced floor beams.
3. Diaphragms for straight girders (does not include diaphragms used for concrete beams).

Use fabricators having a Category CBR, SBR, SBD, or CBD certification to fabricate the following:

1. Modular expansion joints.
2. Steel grid decking.
3. Overhead sign bridge and cantilever sign structures.
4. Lighting poles and anchor bases.

559.02.2 FURNISH PILE Page 269 2-19-09

Rescind the second paragraph (that begins with “The specified lengths…”) and replace with the following:

The specified lengths are those required below cutoff. Adjust lengths for the difference between the cut off length and the pile position in the driving equipment and as necessary to meet the requirements of Subsection 559.02.5. Increase pile lengths 1.0 foot (300 mm) for steel pile. Remove and dispose of excess pile length after the pile is driven.

559.02.4 SPLICING PILES Page 269 2-19-09

Rescind the first sentence of the first paragraph (that begins with “Splice piles driven…”) and replace with the following:

When directed by the Project Manager, splice piles driven to plan grade that do not obtain the required driving resistance and continue driving until the required capacity is obtained.

559.02.5 HOLES IN PILING Page 269 2-19-09

Add the following subsection:

559.02.5 Holes in Piling

Pile segments with one drilled hole having a diameter of 7/8 inch (22 mm) or less in any cross-section may be incorporated into the finished structure. Pile with more than one hole in a cross-section, flame cut hole(s), or a hole greater than 7/8 inch (22 mm), must be cut off to remove the hole(s).This requirement does not apply to holes drilled for attaching dynamic testing equipment, holes shown in the plans or holes within 12 inches (305mm) of the cutoff elevation.

559.03.3 PILE CAPACITY Page 271-273 1-31-08

Delete the first two sentences of 559.03.3(A) (that begins with “Drive the pile to ….”) and replace with the following:

A. Driven Pile Capacity. Drive the pile to the design tip elevation shown on the plans, or deeper, if necessary and to the ultimate pile capacity during driving shown on the plans. The Project Manager will use one of the following methods specified to determine the ultimate driven pile capacity and the service pile driving criteria.

Replace the third paragraph in 559.03.3(B)(2) Dynamic Load Tests (that begins with “With dynamic testing …”) and replace with the following:

With dynamic testing equipment attached, drive the pile in one continuous operation to the design tip elevation, or deeper if directed by the Project Manager. The Project Manager may lower the required tip elevation based on the ultimate pile capacity measurements at the time of driving or re-driving. Reduce the driving energy to the pile to maintain pile stresses below the values specified in Subsection 559.03.3(A)(2), using additional cushions or reduction of the hammer’s output energy. If eccentric driving is indicated, immediately re-align the driving system. Provide a printed summary of the dynamic load test results and recommendations for service pile driving criteria (blow count and stroke) and pile tip elevation. The Project Manager will determine the service pile driving criteria and minimum pile tip elevations based on the dynamic load test results and specialty consultant’s recommendations.

Replace the fourth paragraph in 559.03.3(B)(2) Dynamic Load Tests (that begins with “If the Project Manager …”) and replace with the following:

Perform a re-drive of the test pile when required by the Project Manager. After initial driving, wait the minimum time specified, then re-drive each dynamic load test pile with the instruments attached. Apply at least 20 resistance blows to warm the hammer before re-driving. Do not warm the hammer using the dynamic load test pile. Re-drive the dynamic load test pile for a maximum penetration of 6 inches(150mm) or a maximum of 50 blows, whichever occurs first.

559.03.3 (B) (2) DYNAMIC LOAD TESTS (PILE CAPACITY) Page 273 2-19-09

Add the following sentence at the beginning of the first paragraph (that begins with “Use a pile…”):

If specified, perform dynamic load tests in accordance with ASTM D 4945 on pile designated for dynamic load tests.

Delete the second sentence of the second paragraph (that reads with “Perform dynamic load tests in accordance with ASTM D 4945 on the pile designated for dynamic load tests”.)

559.03.5 SERVICE PILE Page 274 2-19-09

Rescind 559.03.5 and replace with the following:

559.03.5 Service Pile

Do not initiate driving of the service piles until all test piles and analysis are complete unless authorized by the Project Manager. Drive the pile to the design tip elevation shown on the plans, or deeper if necessary to achieve the ultimate pile capacity during driving. If specified, establish pile tip elevation and ultimate pile capacity by compression load testing or dynamic load testing.

Furnish the service pile lengths specified in the contract. Adjust pile lengths for the difference between cutoff length and the pile position in the driving equipment.

The Project Manager will observe the pile driving and calculate the predicted pile capacity as it is being driven.

When a re-drive of the service pile is required, re-drive the pile not less than 24 hours or more than 72 hours after initial driving and do not drive the pile below cut off elevation. If the Project Manager determines pile stresses during driving are damaging the pile, the Department may require other installation methods or equipment to obtain pile penetration.

Correct or replace improperly driven, damaged or defective pile at Contractor’s expense.

Temporary welded plates for aligning field splices or hoisting may be used with the Project Manager's approval. Remove temporary plates and grind welds smooth.

559.03.7 STEEL PIPE PILE Page 274 2-19-09

Rescind Supplemental Specification 559.03.7 (Effective 1-31-08) and replace with the following:

Securely cover driven pipe piling to prevent open-hole hazards.

Remove water in steel pipe piles before placing concrete or place the concrete using a tremie when water is present in the pile.

Provide lighting to illuminate the full pile length when requested to aid inspection of the pile before placing concrete. Fill steel pipe piles to an elevation no less than 2 feet (600 mm) below the cut off elevation with Class "DD" Portland cement concrete a minimum of 12 hours prior to pouring the cap.

Do not place concrete in pipe piles until all piles for the bent have been driven.

559.03.8 PAINTING STEEL PILE OR STEEL PIPE PILE Page 275 12-27-07

Delete the reference to Subsection 710.02(B)(4) under part (A) Paint, and replace with 710.02(B)(3).

559.04.1 LOAD TESTS (PILING) Page 275 2-19-09

Rescind Subsection 559.04.1 and replace with the following:

Static and dynamic load tests, and test pile re-drives, completed and accepted are measured by the unit. Include all materials, tools, the first 24 hours of standby time for items dedicated solely to this work, and equipment required to perform each test or test pile re-drive in the unit bid price for the item.

Furnishing, driving, splices, re-driving of service piles and pile end protection are measured for payment as outlined in other Subsections. Do not include these costs in the static and dynamic load tests.

559.04.2 FURNISH PILE Page 275 2-19-09

Rescind Subsection 559.04.2 and replace with the following:

Furnish pile is measured by the foot (meter) based on the plan quantity.

559.05 BASIS OF PAYMENT (PILING) Page 276 2-19-09

Rescind Supplemental Specification 559.05 (Effective 8-1-07) and replace with the following:

The Department will not pay for:

- Furnishing or driving falsework pile;
- Pile driven out of place and not accepted;
- Defective pile, or pile damaged in handling or driving;
- Forming holes;
- Lengths of pile cut off according to Subsection 559.02; or
- Welding temporary plates, removing the plates and grinding the welds smooth.

Include payment for the costs associated with painting steel pile and steel pipe piles and filler concrete in the contract unit price per foot (meter) of drive pile.

Pile furnished, based on the plan quantities, but not incorporated in the finished structure, is paid for at the contract unit price per foot (meter) of furnish pile and becomes the property of the Contractor. Pile furnished in addition to plan quantity that is incorporated in the finished structure, is paid for by lump sum agreed price or under Subsection 109.04.2..

Payment for the completed and accepted quantities is made under the following:

Pay Item	Pay Unit
Static Load Test	Each
Dynamic Load Test	Each
Re-drive Test Pile	Each
Furnish Pile	Foot (meter)
Drive Pile	Foot (meter)
Pile Pre-bore	Foot (meter)
Pile Drill and Socket	Foot (meter)
Pile Splice	Force Account
Pile Driving Point	Each

Pay Item	Pay Unit
Pile Conical Driving Point	Each
Pile Cutting Shoe	Each
Re-drive Test Pile	Each
Re-drive of Service Pile	Force Account

Partial payments for drive pile will be made based on the total quantity as follows:
1. 95 percent when the piles are driven to final penetration.
2. 100 percent when the piles are cut off and painted as specified.

603.03.4 BACKFILLING (CULVERTS AND PIPES) Page 284 3-1-07

Delete part B Imperfect Trench Method.

Renumber part C Rock Embankment as part B.

603.04.3 BEDDING AND FOUNDATION MATERIAL Page 285 11-8-07

Rescind the first sentence (that begins with "Bedding and foundation …") and replace with the following:

Bedding and foundation material is measured by the cubic yard (cubic meter) in place for pipes greater than 48" (1.2 m) diameter. Include the cost of bedding material for pipes 48" (1.2m) diameter or less in the cost of the pipe.

606.03.2 INSTALLING POSTS Page 290 12-27-07

Delete the reference to Subsection 705.01.6 in the eighth paragraph, and replace with 705.01.5.

607.02.1 SNOW FENCE (NEW) Page 295 12-27-07

Add the following new Subsection:

Furnish all timbers, lumber and hardware as specified.
A. All lumber used must meet the Western Wood Products Association requirements, or equivalent grading rules for #2 grading and 3 common or better, all of which must meet ASTM D 245.
B. All treated material must meet the requirements of Subsection 706.04 or the special provisions.

609.04 METHOD OF MEASUREMENT (CURBS AND GUTTERS) Page 304 10-1-06

Rescind Subsection 609.04 and replace with the following:

Curb, integral curb and gutter, and median concrete curb are measured by the foot (meter) to the nearest 0.1-foot (0.1m) along the face of the curb at the flow line.
Paint and painting is measured by the gallon (Liter) under Subsection 620.04.
A. Contracts with Curb, Integral Curb and Gutter, Median Curb, and Precast Concrete Curb Work Not in Conjunction with Roadway Reconstruction. Reinforcing Steel, expansion joint material, bond breaker, excavation or embankment, crushed gravel base, emulsified asphalt and disposal of material associated with the work are not measured for payment.
B. All Other Contracts. Reinforcing Steel, expansion joint material, bond breaker, disposal of material, crushed gravel base and emulsified asphalt are not measured for payment. Excavation or embankment associated with the work is measured by the cubic yard (cubic meter).

609.05 BASIS OF PAYMENT (CURBS AND GUTTERS) Page 304 10-1-06

Rescind Subsection 609.05 and replace with the following:

Payment for completed and accepted quantities is made under the following:

Pay Item	Pay Unit
Curb	Foot (meter)
Integral Curb and Gutter	Foot (meter)
Median Concrete Curb	Foot (meter)
Paint	Gallon (liter)

A. Contracts with Curb, Integral Curb and Gutter, Median Curb, and Precast Concrete Curb Work Not in Conjunction with Roadway Reconstruction. The cost of reinforcing steel, expansion joint material, bond breaker, curing compound, excavation or embankment, crushed gravel base, emulsified asphalt and disposal of material associated with the work are included in the contract unit price of curb and gutter.
B. All Other Contracts. The cost of reinforcing steel, expansion joint material, bond breaker, curing compound, crushed gravel base, emulsified asphalt, and disposal of material associated with the work are included in the

contract unit price of curb and gutter. Excavation or embankment associated with the work is paid for under the specified type of earthwork.

Payment at the contract unit price is full compensation for all resources necessary to complete the item of work under the contract.

610.03.2 (A) GENERAL (SEEDING, FERTILIZING, AND MULCHING) Page 305 7-31-08

Add the following paragraph after the last paragraph (that begins with "Seed all disturbed …")

After all condition seedbed surface, seeding, and fertilizing work is complete, remove and dispose of any oversize material that protrudes 4-inchs (100 mm) or more above the conditioned seedbed surface

610.04.4 CONDITION SEEDBED SURFACE Page 308 7-3-08

Add the following after the first paragraph:

Removal of oversized material from the conditioned seedbed surface is not measured separately for payment.

610.05 BASIS OF PAYMENT (REVEGETATION) Page 309 7-3-08

Add the following after the "Pay Item" and "Pay Unit" line items:

Include the cost of removing oversize material from the conditioned seedbed surface in the cost for Condition Seedbed Surface.

611.02.3 PAINT (CATTLE GUARDS) Page 311 12-27-07

Delete the Subsection requirements and replace with the following:

Shop (Prime Coat) ……710.02(B)(6)
Aluminum Paint (Finish Coat) …….. 710.02(B)(1)

612.01 DESCRIPTION (PAINTS AND PAINTING) Page 313 2-19-09

Rescind the first paragraph (that begins with "This work is …") and replace with the following:

This work is the surface preparation, furnishing and applying the paint or powder coating, and protecting the paint and powder coatings, pedestrians, vehicular or other traffic upon or under the surface being painted or coated.

612.02 MATERIALS (PAINTS AND PAINTING) Page 313 2-19-09

Add the following paragraph at the end of the first paragraph (that begins with "Furnish Materials meeting…")

Coat powder coated items with a TGIC Polyester powder

612.03.6 APPLICATION OF POWDER COAT Page 317 2-19-09

Add the following Subsection:

612.03.6 Application of Powder Coat

A. Surface Preparation. Prepare surfaces to be powder coated following the powder manufacturer's recommendations.
B. Application of Coating Material. Apply the coating as specified by the powder manufacturer, following all recommendations for metal preparation, coating procedures, and cure of the coating.
C. Handling of Coated Material. Handle coated materials to prevent damage or contamination and to limit required touchup or repair.
D. Sampling and Testing. The Department may accept the coating on the basis of a Certification of Compliance or through inspection of the application and the finished coatings at the applicator's plant. The Department may sample and test any or all materials at any time.
E. Damage and Repair. The Project Manager will determine if damaged items may be repaired or if the item will be rejected. Follow the manufacturer's procedures for maintenance and touchup repair due to handling and installation. Ensure at least one pound, or an equivalent prepackaged unit, of patching material compatible with the coating is on site for repairs to the coating damaged by handling. The patching material may be a liquid, which hardens to a solid on curing.

612.04 METHOD OF MEASUREMENT Page 317 2-19-09

Rescind the first paragraph (that begins with “Paints and painting …”) and replace with the following:

Paints, painting, and powder coating are incidental to the items being painted or coated and are not measured separately.

612.05 BASIS OF PAYMENT Page 318 2-19-09

Rescind the first paragraph (that begins with “Paints and painting …”) and replace with the following:

Paints, painting, and coating are not paid for separately but are included in the cost of the item painted and includes all materials and resources necessary to complete the work.

614.02 MATERIALS (RETAINING WALLS) Page 323 12-27-07

Delete the Subsection requirement for Metal Bin-Type Retaining Walls and replace with the following:
Metal Bin-Type Retaining Walls …… 711.17

617.04.2 TRAFFIC SIGNALS AND LIGHTING Page 336 12-27-07

Add the following to the list of bullet items under number 4:
- Overheight Detector

617.05 BASIS OF PAYMENT (TRAFFIC SIGNALS AND LIGHTING) Page 336 12-27-07

Add the following under the list of Pay Items and Pay Units:
Overheight Detector Each

618.03.2 TRAFFIC CONTROL PLAN Page 339 11-8-07

Add the following sentence in the third paragraph as the new third sentence:

Include in the plan proposed measures and devices to keep rock trucks, scrapers, and similar earth hauling vehicles separated from traffic.

618.03.6 ACCESS BREAKS Page 340 7-3-08

Add the following sentence after the last sentence of the third paragraph (which begins with “Do not begin work on the access break…”)

Excluding traffic control, assume all costs associated with construction, maintenance, removal of the access break, and restoration of the area once the access break is removed.

Rescind the fourth paragraph (which begins with “Assume all costs…”)

618.03.7(A) CROSSING, ENTERING, AND USING ROADWAYS Page 341 11-8-07

Delete the fourth paragraph (that begins with, “Operate hauling units with…”) and replace with the following:

Stop traffic whenever rock trucks, scrapers, and similar earth hauling vehicles are used on the same roadway as traffic at the same time. Operate registered and licensed hauling units with the flow of traffic. Do not operate hauling units on roadway shoulders.

618.03.7(B) LIMITED ACCESS AND MULTIPLE-LANE ROADWAYS Page 341 7-3-08

Rescind the title of Part B. and the first sentence of Part B. (that begins with “Use frontage roads…”) and replace with the following:

B. Controlled Access and Multiple-lane Roadways. Use frontage roads and interchanges for equipment access to controlled-access highways whenever possible.

Rescind the first sentence of the second paragraph in Part B. (that begins with “Do not stop the general traffic …”) and replace with the following:

Do not stop the general traffic on one-way roadways for the convenience of haul units without Department approval.

Rescind the third paragraph in Part B. (that begins with “Haul unit turning movements …”) and replace with the following:

Haul unit turning movements are restricted to right-turn movements only, when there is access to the project by frontage roads or where left-turn movements by hauling units would pose a hazard to the traveling public.

Rescind Number 1 (that begins with “The distance between …”) and replace with the following:

1. The distance between any two median crossings, including interchanges, authorized vehicle median crossings, and temporary median crossings must be at least 2 miles (3.2 km) unless a shorter distance is approved by the Department.

618.03.11 TRAFFIC CONTROL FOR SEAL COAT OPERATIONS Page 344 7-3-08

Rescind the first sentence of Part A. (that begins with “Place "LOOSE GRAVEL"…”) and replace with the following:

Place "LOOSE GRAVEL" (W8-7), “DO NOT PASS” (R4-1) and “SPEED LIMIT 35” (R2-1) signs, at the beginning of each work zone.

Rescind the second paragraph in Part B. (that begins with “Place "LOOSE GRAVEL"…”) and replace with the following:

Place "LOOSE GRAVEL" (W8-7), “DO NOT PASS” (R4-1) and “SPEED LIMIT 45” (R2-1) signs at the beginning of each work zone. Sign both sides of the roadway. Place the same sign combination for each direction of travel at 2-mile (3.2 km) intervals within the work zone.

618.04.1 TRAFFIC CONTROL DEVICES Page 347 2-19-09

Rescind the second paragraph (that begins with “Signs and devices…”) and replace with the following paragraph:

Signs and devices must meet standards outlined in the current ATSSA “Quality Guidelines for Temporary Traffic Control Devices” to be measured for payment.

618.04.6 ITEMS NOT ELIGIBLE FOR SEPARATE PAYMENT Page 347

Rescind the sixth bullet under paragraph one and replace with the following: 6-1-06

- Illumination of work areas.

Add the following to the bullet list: 10-1-06

- Traffic Control at commercial pits that are outside the project limits.

618.05.1 TRAFFIC CONTROL DEVICES Page 348 1-1-07

Delete the third paragraph (that begins with “Traffic control devices are bid……”).

620.03.2 LAYOUT OF PAVEMENT MARKINGS Page 357 5-1-08

Rescind Subsection 620.03.2 and replace with the following:

The Project Manager will layout the final pavement marking configurations and locations. Notify the Project Manager a minimum of 10 days before striping in the permanent location is to begin.

Preserve all marking configurations and locations after the initial layout by the Department.

Apply the centerline and shoulder lines within 0.30 feet (90 mm) of the true line. Ensure the stripe does not deviate by more than 0.15 foot (50 mm) in 500 feet (152 m).

Apply all other markings (words, symbols, stop bars, crosswalks, hash marks, and others) within 0.25 feet (75 mm) of the location marked by the Project Manager.

The Project Manager will determine the accuracy of the applied markings.

Remove and replace out of specification pavement markings as directed at Contractor expense.

620.03.6 EPOXY PAVEMENT MARKINGS Page 359 12-18-08

Rescind Subsection 620.03.6 part (A) and replace with:

A. Materials. Furnish Materials meeting Subsection 714.05 and 714.08 requirements.

Add the following sentence after the last sentence of Subsection 620.03.6 part (D) (1):

The Project Manager may extend the 45 days due to holidays or inclement weather that prevent the application of epoxy pavement markings.

Rescind the third paragraph of Subsection 620.03.6 part (D) (2) (that begins with "Apply a 20-mil ± 2 mil…") and replace with the following:

Apply a 20-mil ± 2 mil (0.508 mm ± 0.051 mm) thick wet film immediately followed by applying at least 25 lbs/gallon (3 kg/L) of Montana Type 2 glass beads to the epoxy. Apply the markings to within 1/4 inch (6 mm) of the specified width.

620.03.6 EPOXY PAVEMENT MARKINGS Page 359 6-1-07

Rescind the third sentence of the second paragraph in part B. (that begins with "Equip the pavement-marking….") and replace with the following:

The pavement-marking machine may be equipped with a flow meter and totalizer that measures paint quantities in gallons (liters), to the nearest 0.1 gallon (0.1L).

Delete the last sentence of the third paragraph in part B. (that begins with "In the event that…").

Add the following new paragraph after the third paragraph in part B.:

Park the equipment on a level surface approved by the Project Manager for each tank measurement.

Rescind the third paragraph in part C. (that begins with "Grind all surfaces…") and replace with the following:

Grind all surfaces with existing epoxy pavement markings within 3 calendar days before applying the pavement marking.

620.03.6 EPOXY PAVEMENT MARKING Page 360 3-27-08

Add the following new sentence/paragraph in 620.03.6, part (D)(2) after the second paragraph (that begins with "Do not place materials before furnishing…"

Apply the markings to within plus or minus 0.25 inch (6 mm) of the specified width.

620.03.7(H) APPLICATION (THERMOPLASTIC PAVEMENT MARKING) Page 362 6-1-06

Rescind the sixth paragraph and replace with the following:

Clean the grooves before placing the thermoplastic material. Meet the surface requirements in Subsection 620.03.7(D).

620.03.7(I) GLASS BEAD APPLICATION Page 363 6-1-06

Rescind the first paragraph (that begins with "Apply glass beads by drop-on …") and replace with the following:

Apply glass beads by drop-on methods immediately after the thermoplastic material application meeting Subsection 620.03.7(H) requirements.

620.04.1 TEMPORARY AND INTERIM PAVEMENT MARKING QUANTITIES Page 364 3-27-08

Add the following two paragraphs after the 3rd paragraph that begins with "Only those pavement markings…"

Should the actual quantity measured by the Project Manager using tank stabs or totalizer exceed the quantity calculated, the lesser quantity will be paid for.

The quantities will be calculated using the application rate (11 mils for temporary and 17 mils for interim) times the specified width (without applying the tolerance) times the length of line applied.

620.04.2 EPOXY PAVEMENT MARKINGS Page 364 3-27-08

Replace the 2nd paragraph that begins “Should the actual quantity …”) and replace with the following:

Should the actual quantity measured by the Project Manager using tank stabs or totalizer exceed the quantity calculated using an application rate of 22 mils times the specified width (without applying the tolerance) times the length of line applied, the lesser quantity will be paid for.

620.04.4 PAINTED PAVEMENT MARKINGS AND CURBS Page 364 6-1-07

Rescind the last sentence of the second paragraph (that begins with “Computerized quantity print outs…”) and replace with the following:

Computerized quantity print outs will be compared against tank stabs and the quantity calculated based on the surface area and an application rate of 22 mils.

620.05 BASIS OF PAYMENT (PAVEMENT MARKINGS) Page 365 6-1-07

Add the following new paragraph after the fourth paragraph of Subsection 620.05.

The quantity that is paid for marking materials is the lesser of the following quantities:

- Flow meter and totalizer;
- Calibrated tank and measuring device (tank stabs); and
- Surface area times the application rate specified.

623.01 DESCRIPTION (MAILBOXES) Page 375 9-1-07

Rescind the first sentence (that beins with “This work is …”) and replace with the following:

This work is the removal, temporary reset, and furnishing and installation of new mailboxes and crash-worthy supports at the specified locations or as directed.

623.02 MATERIALS (MAILBOXES) Page 375 9-1-07

Rescind the first paragraph (that begins with “Furnish Rubbermaid …”) and replace with the following:

Furnish new mailboxes, measuring at least 6 1/2 inches wide x 7 1/2 inches high x 18 1/2 inches long (165 mm x 190 mm x 470 mm), not exceeding 10 pounds (4.5 kg) in weight that meet the Postal Service requirements for the designated location (area with or without curb and gutter).

623.03 CONSTRUCTION REQUIREMENTS (MAILBOXES) Page 375 9-1-07

Rescind the first sentence (that begins with “Install the mailbox …”) and replace with the following:

Reset all mailboxes removed during construction at temporary locations approved by the Project Manager. Install permanent mailboxes and supports at the locations shown in the plans.

623.04 METHOD OF MEASUREMENT (MAILBOXES) Page 375 9-1-07

Rescind the first sentence (that begins with “The mailbox and its support …”) and replace with the following:

Mailbox and support are measured as a unit. Removal and temporary resets are not measured for payment.

701.02.1 GENERAL REQUIREMENTS-(AGGREGATE FOR SURFACING) Page 380 5-1-08

Rescind the first paragraph (that begins with “The following test methods …”) and replace with the following:

The following test methods are used to evaluate the surfacing aggregate quality:

Sieve Analysis For Fine And Coarse Aggregate	MT-202
Wear Test	MT-209
Liquid Limit, Plastic Limit, Plasticity Index	MT-208
Fracture	MT-217
Volume Swell of Bituminous Mixtures	MT-305
Sulfate Soundness	AASHTO T-104 or ASTM C-88
Micro-Deval	MT-233

Rescind the second paragraph (that begins with “Sulfate soundness will be …”) and replace with the following:

Passing wear test results are mandatory for Department approval of sources. Micro-Deval or Sulfate soundness tests may be used by the Department for source approval. If any of the tests fail the Contractor may not use the source to produce coarse surfacing aggregate.

701.02.8 CRUSHED COVER AGGREGATE (COVER MATERIAL) Page 385 7-31-08

Rescind the first sentence of requirement 1, which reads:

The material for Grades 1A through 4A must be non-plastic.

701.03.1 GENERAL REQUIREMENTS (AGGREGATE FOR BITUMINOUS MIXTURES) Page 386 5-1-08

Rescind the first paragraph (that begins with “The following test methods …”) and replace with the following:

The following test methods will be used to evaluate the quality of aggregate to be bituminized:
Sieve Analysis For Fine And Coarse Aggregate.....MT-202
Wear Test.....MT-209
Liquid Limit, Plastic Limit, Plasticity Index.....MT-208
Fracture.....MT-217
Volume Swell of Bituminous Mixtures.....MT-305
Plastic Fines in Graded Aggregates…… MT-213
Sulfate Soundness.....AASHTO T-104 or ASTM C-88
Micro-Deval.....MT-233

Rescind the second paragraph (that begins with “Sulfate soundness will be …”) and replace with the following:

Passing wear and volume swell test results are mandatory for Department approval of bituminized material aggregate sources. Micro-Deval or Sulfate soundness tests may be used by the Department for source approval. If any of the tests fail the Contractor may not use the source to produce coarse aggregate to be bituminized

701.04.1 BEDDING MATERIAL (TABLE 701-17) Page 388 3-1-07

Rescind Table 701-17 and replace with the following:

TABLE 701-17
TABLE OF GRADATIONS - BEDDING MATERIAL

PERCENTAGE BY WEIGHT PASSING SQUARE MESH SIEVES	
Sieve Size	Percent Passing
1 1/2 inch (37.5 mm)	100
No. 4 (4.75 mm)	24-60
No. 200 (0.075 mm)	12 maximum

Delete the note (that begins with “Use minus 1 ½-inch …”)

701.11 GLASS CULLET Page 391 1-31-08

Replace part D (that begins with “Limit the glass …”) and replace with the following:

Limit the glass cullet content to no more than 10 percent of the total blended product.

702.1 BITUMINOUS MATERIALS Page 393 7-3-08

Rescind the Emulsified Asphalt requirements and replace with the following:

Emulsified Asphalt.....AASHTO M 140*, Table 1 or
AASHTO M 208*, Table 1

*Cement mixing test does not apply when SS-1 or CSS-1 emulsion is used for spray or tack application.

702.02 TESTING AND ACCEPTANCE Page 394 7-3-08

Rescind the Second row of Table 702-2 Schedule of Tolerances, and replace with the following:

Penetration Liquid Asphalt (excluding CRS-2P) Distillation Residues	-10%	+10%	
CRS-2P Distillation Residues	-15%	+10%	

702.02 TESTING AND ACCEPTANCE (TABLE 702-2) Page 394 7-1-06

In Table 702-2, rescind "% Residue from Distillation" under the Test column and replace with "% Residue".

702.02 TESTING AND ACCEPTANCE (TABLE 702-8) Page 399 7-1-06

Add the following note under Table 702-8:

1. AASHTO T 59 Residue by evaporation will be used to obtain samples for all residue testing requirements. AASHTO T 59 is modified deleting note 8.

703.02.1 PLASTIC CONDUIT Page 401 12-18-08

Rescind Subsection 703.02.1 and replace with the following:

703.02.1 Plastic Conduit

Furnish rigid polyvinyl chloride meeting UL 651 or UL 651B, schedule 80, 150 °F (66 °C) wire rated, direct bury type, or directional boring. Install conduit meeting the applicable requirements of Section 616.

703.16 TREATED TIMBER POLES Page 417 9-1-07

Rescind Subsection 703.16 and replace with the following:

Furnish the pole length and place as specified in the contract.

Furnish ANSI Class 4 poles as specified in the contract. Full length pressure treat poles with a five percent solution of pentachlorophenol or Copper Naphthenate (CuN) meeting AWPA Standards and Commodity specification D and Use Category 4A. Seat, backfill, and compact around the poles. Compact backfill in 9-inch (230 mm) lifts. Plumb and rake the pole as directed.

Treat injuries, cuts, and holes in poles after treatment with three applications of copper naphthenate solution containing a minimum two percent copper metal or with Chromated Copper Arsenate (CCA) meeting AWPA M4 requirements.

703.17.3 WOOD POLES FOR OVERHEAD CONDUCTOR HIGHWAY LIGHTING Page 417 9-1-07

Delete Subsection 703.17.3 Wood Poles for Overhead Conductor Highway Lighting.

703.17.7 OVERHEIGHT DETECTOR Page 419 12-27-07

Delete the reference to Subsection 617.05.2 in the fifth paragraph and replace with 617.05

704.01.5 TREATED TIMBER POSTS Page 422 9-1-07

Rescind the first sentence of the first paragraph (starting with "Furnish treated timber posts…") and replace with the following:

Furnish treated timber posts of construction grade, S4S, full length pressure treated with a five percent by weight pentachlorophenol solution or Chromated Copper Arsenate (CCA), Type B or C, or Ammoniacal Copper Arsenate (ACA) or Copper Naphthenate (CuN) meeting AWPA standards and Subsection 706.04.

704.01.6 TREATED TIMBER POLES Page 423 9-1-07

Rescind Subsection 704.01.6 Treated Timber Poles and replace with the following:

Timber poles are specified by the top diameter. Meet the Table 704-2 top diameter limits:

TABLE 704-2
TIMBER POLE - TOP DIAMETER LIMITS

SPECIFIED TOP DIAMETER inch (mm)	DIAMETER LIMITS inch (mm)	
	Min.	Max.
3 (75)	3 (75)	4 (100)
4 (100)	4 (100)	5 (130)
5 (130)	5 (130)	6 (150)
6 (150)	6 (150)	7 (180)

Furnish poles that are straight so that a line from center of tip to center of butt passes through the pole body from tip to butt. The poles must be free of crooks and sweeps. Perform all machining before treatment. Full length pressure treat all Timber poles with a 5 percent by weight pentachlorophenol solution or Chromated Copper Arsenate (CCA), Type B or C, or Ammoniacal Copper Arsenate (ACA) or Copper Naphthenate (CuN) meeting AWPA standards.

Treat naturally round poles meeting AWPA standards and Commodity Specification B and Use Category 4A. Machined round post must have a minimum preservative penetration of 3/8 inch (9 mm) and retention requirements meeting AWPA standards listed above for naturally round posts. Machined round post with sapwood up to 1 inch (25 mm) thick 100 percent of the sapwood must be treated and for post with sapwood more than 1 inch (25 mm) thick a minimum of 85 percent of the sapwood must be treated.

Treat damaged, cut, or bored holes in treated posts meeting Subsection 704.01.5 requirements. Gain each pole on the sign face at least 2 inches (50 mm) in width as specified in the Detailed Drawings.

Use pressure treated, construction grade 2-inch x 4-inch (50 x 105 mm) in S4S for back bracing.

704.01.7 BARN POLES Page 423 9-1-07

Delete Subsection 704.01.7 Barn Poles.

705.01.2 WOOD POSTS AND BLOCKOUTS Page 427 9-1-07

Rescind the second paragraph (starting with “Meet the Western Wood Products Association…”) and replace with the following:

Meet the Western Wood Products Association requirements or equivalent grading rules for #2 grading or better, all of which must meet ASTM D 245.

Delete the fourth sentence of the third paragraph (starting with “Furnish wood posts and blocks…”).

Delete the fifth sentence of the third paragraph (starting with “ The minimum penetration depth…”).

705.03.1 WOOD TREATMENT Page 428 9-1-07

Rescind Subsection 705.03.1 Wood Treatment and replace with the following:

Furnish wood posts and blocks pressure treated meeting Subsection 706.04, with a five percent by weight pentachlorophenol solution Chromated Copper Arsenate (CCA), Type B or C, or Ammoniacal Copper Arsenate (ACA) or Copper Naphthenate (CuN) meeting AWPA standards. Chamfer and perform other required framing and boring of bolt holes before post treating. Plug drill holes used for determining preservative penetration depth with tight fitting treated wood plugs.

Treat injuries, cuts, and holes in posts after treatment with three applications of copper naphthenate solution containing a minimum two percent copper metal or with Chromated Copper Arsenate (CCA) meeting AWPA M4 requirements.

706.04 TREATED TIMBER AND LUMBER Page 429 9-1-07

Rescind the paragraph in 706.04 (starting with “Furnish structural timber…”) and replace with the following:

Furnish structural timber and lumber treated with a wood preservative specified as follows.

706.04.1 TREATING Page 429 9-1-07

Rescind Subsection 706.04.1 Treating and replace with the following:

Furnish timber and lumber that is pressure treated retaining at least the minimum preservative treatment quantity per cubic foot (cubic meter) specified in AWPA Standards and Commodity Specification A with retention specifications from Commodity specification B Use Category 4B.

Use one of the following preservatives:

- Creosote oil, creosote coal tar solution, five percent by weight pentachlorophenol solution.
- Chromated Copper Arsenate (CCA), Type B or C.
- Ammoniacal Copper Arsenate (ACA).
- Copper Naphthenate (CuN).

Use preservative meeting AWPA standards.

Treated timber or lumber to receive paint must permit the paint to adhere to the treated surface without discoloration.

Meet AASHTO M 133 requirements for all preservatives and their sampling and testing methods.

Treat injuries, cuts, and holes in timber and lumber after treatment with three applications of copper naphthenate solution containing a minimum two percent copper metal or with Chromated Copper Arsenate (CCA) meeting AWPA M4 requirements.

706.04.2 INCISING Page 429 9-1-07

Rescind Subsection 706.04.2 Incising and replace with the following:

Mechanically incise timber and lumber of the listed species as specified in section 8.1 of AWPA Standard T1having a nominal thickness of 2 inches (actual 38 mm thickness) or greater before treating.

Incise timber and lumber 3 inches (63 mm actual thickness) thick or greater on all four sides. Incise timber and lumber less than 3 inches (63 mm actual thickness) thick on the wide faces only, unless otherwise specified. Ensure incision patterns for all other material are dense enough to achieve uniform depth of penetration as specified in section 8.1.12 of standard T1 in the AWPA Standards. Incise Intermountain Douglas Fir then treat to refusal with preservative and retention requirements meeting AWPA standards listed in 706.04.1. Refusal being specified as the pressure and temperature shall be maintained constant or be increased within a range with good practice for the material being treated until the quantity of preservative absorbed in each of any two consecutive half hours in not more than 2 percent of the amount already injected. 1 1/2-inch (38 mm actual dimension) center-matched material used for flumes, boxes, etc., does not need to be incised.

Follow the requirements for minimum incision depths in Table 706-1:

TABLE 706-1
MINIMUM INCISION DEPTHS

SIZE IN INCHES (mm)	MINIMUM DEPTH OF INCISION inch (mm)
1 1/2 x 12 (38 x 286)	3/8 (9)
3 x 12 (63 x 290)	7/16 (11)
4 x 12 (89 x 290)	1/2 (13)
6 x 8 (145 x 190)	1/2 (13)
8 x 10 (190 x 240)	9/16 (14)
10 x 12 (240 x 290)	5/8 (16)
12 x 12 (290 x 290)	3/4 (19)

Notes:

- Proportion intermediate sizes.

706.04.3 INSPECTION Page 430 9-1-07

Rescind Subsection 706.04.3 Inspection and replace with the following:

Wood products will be inspected by the method outlined in MT 404. Only wood products with worm holes and any staining due to fungus will be inspected in the white along with the moisture content of Intermountain Douglas Fir. For inspecting wood in the white a minimum of 72 hours advanced notice must be given and must be traceable from inspection in the white to inspection of the treated product. If stain is present in the wood use only material with blue stain. The correct moisture content for Intermountain Douglas Fir is 22 percent plus or minus 2 percent and the method to obtain this moisture content is outlined in the AWPA standards.

The acceptance of any material or finished members by the Inspector does not prevent their rejection if found defective. Replace rejected material and work at Contractor expense.

706.05(A) TIMBER PILES – TREATED TIMBER PILES Page 430 9-1-07

Rescind Subsection 706.05 (A) Treated Timber Piles and replace with the following:

A. Treated Timber Piles. Furnish treated timber piling of Douglas Fir, Southern Pine, or Western Larch meeting ASTM D 25 requirements, excluding Tables 1 and 2.

Season, condition, and treat piles meeting ASTM D 1760 and AWPA Standards and Commodity Specification E for preservative treatment by pressure process. Use creosote oil, creosote coal tar solution, or a 5 percent by weight pentachlorophenol solution or Copper Naphthenate (CuN) for the preservative.

Treat injuries, cuts, and holes in timber pile after treatment with three applications of copper naphthenate solution containing a minimum two percent copper metal meeting AWPA M4 requirements.

707.02.1 RUBBER GASKETS Page 431 6-1-06

Rescind the first paragraph and replace with the following:

Furnish ring gaskets meeting ASTM C1619-05 requirements.

707.02.2 FLEXIBLE PLASTIC GASKETS Page 431 6-1-06

Rescind the title of Subsection 707.02.2 and replace with “Flexible Bituminized Gaskets”:

Rescind the first sentence of the first paragraph and replace with the following:

Furnish flexible bituminized joint compounds produced from refined hydrocarbon resins and plasticizing materials reinforced with inert mineral filler and not containing solvents.

710.02.3 PAINT COATING SYSTEMS FOR STRUCTURES Page 445 3-1-07

Rescind the first sentence of part C (that begins with “C. Finish Coat. Provide …”) and replace with the following:

C. Finish Coat. Provide a urethane paint meeting Table 710-6 requirements.

710.03 PREQUALIFICATION AND CERTIFICATION (POWDER COATING) Page 446 2-19-09

Add the following subsection to Section 710:

710.03 PREQUALIFICATION AND CERTIFICATION.

Provide certified test results of the tests shown in Table 710-7. The test results must be from an independent professional testing laboratory. Submit certified test results and samples for approval. Only coatings approved are permitted to be used.

TABLE 710-7
CERTIFIED TEST RESULTS

Test Name	ASTM Designation	Specification Limits
Salt Spray Test	D1654	Rating Number Minimum 6 (from Table 2)
Impact Test	D2794	Minimum 80 in.-lbs
Chemical Resistance Test	D1308	Original Property Obtained
Cross Hatch Adhesion Test	D 3359	5A or 5B Minimum
Hardness Test	D3363	2H
Bend Test	D522	180 degree Bend ½ inch diameter mandrel with No Breaks Flaking or Cracks
Weather Resistance	G53	1,000 hours No Film Failure
Thickness	G12	3 mil Minimum
Abrasion Taber Abraser	D1044	1,000 gram 1,000 cycles 100 mg maximum weight loss

Submit two 4 inch by 4inch by 24 gage coupons along with the test results of the coated material used to the Project Manager. The coating must be representative of expected quality and color of coatings from a production line.

712.01.1 GENERAL (CHAIN LINK FENCE) Page 451 10-9-08

Rescind section 712.01.1 and replace with the following:

Meet AASHTO M 181 requirements, as modified herein. Use one of the following fence fabrics, as specified in the contract:

- Type 1 Class C Zinc-coated Steel
- Type 2 Aluminum-coated Steel
- Type 3 Aluminum Alloy

Zinc-5 Percent Aluminum-Mischmetal alloy meeting the requirements of ASTM B 750 may be substituted for zinc coating (hot-dipped) at a Class 2, or 1.0 oz/ft^2 (305 g/m^2), coating thickness as specified by ASTM F 1345.

Use zinc-coated steel for all Type 1 and Type 2 fabric fence parts; including posts, rails, gate frames, expansion sleeves, wire ties, fabric ties, hog rings, tension wire, miscellaneous fittings, and hardware. Use aluminum alloy for these same Type 3 fabric fence parts. Use either zinc-coated steel or aluminum alloy for these Type 4 fabric fence parts.

712.01.6 TIE WIRE (FENCE) Page 451 10-9-08

Rescind the first paragraph (that begins with “Furnish 9-gauge galvanized…”) and replace with the following:

Furnish 9-gauge galvanized steel tie wire meeting AASHTO M 279 (ASTM A 116) requirements. Furnish 11-gauge; Class 1 galvanized steel hog ring fasteners meeting AASHTO M 279 (ASTM A 116) requirements.

712.01.7 TENSION WIRE (FENCE) Page 451 10-9-08

Rescind the first paragraph (that begins with “Furnish 7-gauge galvanized…) and replace with the following paragragh:

Furnish 7-gauge galvanized coiled spring steel tension wire. Meet AASHTO M 279 (ASTM A 116), Class 1 galvanizing requirements.

712.02.1 WOVEN WIRE (FENCE) Page 454 10-9-08

Rescind 712.02.1 and replace with the following:

Furnish woven wire meeting AASHTO M 279 (ASTM A 116) requirements and either of the Table 712-2 designations.

TABLE 712-2
WOVEN WIRE REQUIREMENTS

INTERSTATE FENCE			
Specification	Grade	Design Number	Metallic Coating
AASHTO M 279 (ASTM A 116)	No. 12 1/2 Grade 60	832-6-12 1/2	Type Z, Class 1 or Type ZA, Class 20
AASHTO M 279 (ASTM A 116)	No. 14 Grade125	832-6-14	Type Z, Class 3 or Type ZA, Class 40

FARM FENCE			
Specification	Grade	Design Number	Metallic Coating
AASHTO M 279 (ASTM A 116)	No. 12 1/2 Grade 60		Type Z, Class 1 or Type ZA, Class 20
AASHTO M 279 (ASTM A 116)	No. 14 Grade125		Type Z, Class 3 or Type ZA, Class 40

Provide a 6-inch (155 mm) stay spacing. Match the fence height and mesh dimensions of the fence being replaced if not specified.

712.02.2 BARBED WIRE (FENCE) Page 454 10-9-08

Rescind 712.02.2 and replace with the following:

Use 2-point 12 1/2 or 13 1/2-gauge barbed wire meeting AASHTO M 280 (ASTM A 121) requirements. Space barbs at a 4-inch nominal (105 mm) or a 5-inch nominal (130 mm) spacing. Provide the Project Manager Certification that the wire meets AASHTO M 280 (ASTM A 121) requirements.

712.02.7 FENCING-METAL POSTS AND ASSEMBLIES Page 454 10-9-08

Add the following at the end of the last paragraph.

Use anchor plates with a minimum area of 18 square inches (11600 square millimeters) that weigh 0.64 pound (0.29 kg) to 0.77 pound (0.35 kg). Taper the anchor plates to facilitate driving.

712.02.8 WOOD FENCE POSTS AND BRACE RAILS Page 455 9-1-07

Rescind Subsection 712.02.8 Wood Fence Posts and Brace Rails and replace with the following:

A. General. Make fence posts and brace rails from well seasoned, sound, and straight-grained Western Larch, Lodgepole Pine, Ponderosa Pine, or Douglas Fir. Remove all bark from the posts.

Taper round posts to be driven from 6 inches to 12 inches (155 to 305 mm) up from the bottom to a maximum of 1 1/4-inch (30 mm) point. Taper the post tops to a round top with a minimum 3-inch (75 mm) diameter for line posts and 4-inch (105 mm) diameter for corner, brace, pull, end, and gate posts or minimum of 3/4 inch (19 mm) chamfer. These taper lengths are included in the specified post lengths. Perform all machining before treatment. Treat the natural round posts and rails meeting AWPA Standards and Commodity Specification B and Use Category 4A requirements. Treat the S4S post as specified in Subsection 706.04.

Machined round post must have a minimum preservative penetration of 3/8 inch (9 mm) and retention requirements meeting AWPA standards listed above for naturally round posts. Machined round post with sapwood up to 1 inch (25 mm) thick 100 percent of the sapwood must be treated and for post with sapwood more than 1 inch (25 mm) thick a minimum of 85 percent of the sapwood must be treated.

Ensure the posts and rails are straight so that a line running from the center of both ends is within the body of the post or rail.

Treat injuries, cuts, and holes in timber pile after treatment with three applications of copper naphthenate solution containing a minimum two percent copper metal meeting AWPA M4 requirements.

B. Posts for Farm Fence and Interstate Fence. Furnish line posts and brace rails from a minimum 4-inch (105 mm) diameter round, or a minimum 4-inch x 4-inch (105 mm x 105 mm) square sawn. Furnish corner, end, gate, and pull posts from a minimum 5-inch (130 mm) diameter round post or a 5 x 5-inch (130 mm x 130 mm) square sawn post.

713.12 SOIL RETENTION/EROSION CONTROL BLANKETS AND MATS Page 461 7-3-08

Add the following paragraph:

All mass per unit area requirements for blankets or mats will be measured under ASTM D 6475 unless otherwise specified.

713.12.1 (C) WOOD EXCELSIOR FIBER BLANKETS (TYPE EX 3) Page 461 7-3-08

Rescind the sentence of Number 1 (that begins with “Minimum weight of …”) and replace with the following:

Minimum weight of 1.6 pounds per square yard (865 g per square meter)

714.02 TEMPORARY PAVEMENT MARKING TABS Page 465 5-1-08

Rescind Part (1)(a) (that begins with “Type I tabs …”) and replace with the following:

a. Type I tabs: white reflectorized tape on both sides with white bodies;

Rescind Part (2) (that begins with “A minimum tape reflectance of …”) and replace with the following:

2. Reflective flexible sheeting meeting ASTM D4956 Type V or better;

714.04 TEMPORARY AND INTERIM PAINT MARKINGS Page 467 12-18-08

Rescind Subsection 714.04 and replace with the following:

714.04 TEMPORARY AND INTERIM PAVEMENT MARKINGS

Furnish either liquid pavement markings or solid pavement marking tape for temporary and interim pavement markings. Submit a manufacturer’s formulation sheet or data sheet for the product to be used.

A. Temporary and Interim Pavement Markings. Furnish marking materials that meet the following:

1. White. Color to match Federal color chip # 37875. Colorimeter readings may be taken on the white portion of a Leneta form 5c. Daylight reflectance is Y=79.80 minimum. Color Coordinates are x=0.3136, y=0.3244. A plus or minus 6 percent tolerance applies to the coordinates.

2. Yellow. Color to match Federal color chip # 595B-33538. Colorimeter readings may be taken on the white portion of a Leneta form 5c. Daylight reflectance is Y=48.32 minimum. Color coordinates are x=0.4851, y=0.4455. A plus or minus 6 percent tolerance applies to the coordinates.

B. Cold weather Interim Pavement Marking. Furnish marking materials that meet the following:

1. Color. Color specifications are the same as part A.
2. Composition. The exact composition is at the manufacturer's discretion but the vehicle must be100 percent acrylic polymer and the paint may not contain any ingredient in the vehicle listed below:
   Lead or chromate compounds; Mercury; Lead; Chromate compounds; Chlorinated solvents; Hydrolysable chlorine derivatives; Ethylene based glycerol ethers and their acetates.
3. Tests.

D-2486	Scrubs resistance, cycles, min	1000
D-1394	Titanium Dioxide	1.0 lb/gal White 0.15 lbs/gal Yellow

714.05 REFLECTIVE GLASS BEADS Page 467 3-1-07

Delete "20 percent" in part B of Subsection 714.05 and replace with "25 percent".

714.05 REFLECTIVE GLASS BEADS Page 468 12-18-08

Rescind Table 714-2 and replace with the following Table:

TABLE 714-2
REFLECTIVE GLASS BEAD GRADATION

SIEVE NUMBER	*PERCENT PASSING*	
	MONTANA TYPE 1	*MONTANA TYPE 2*
20 (0.850 mm)	100	90 - 97
30 (0.600 mm)	75-95	50-75
40 (0.425 mm)	------	15 - 45
50 (0.300 mm)	15-35	0 - 15
80 (0.180 mm)	------	0 - 5
100 (0.150 mm)	0 - 5	------

714.08(B) MATERIALS (Epoxy Pavement Marking Material) Page 471 7-3-08

Delete "20 percent" in part B of Subsection 714.05 and replace with "25 percent".

Rescind the third sentence in Number 1. General (That begins with "Mix the components….") and replace with the following:

Mix the components within plus or minus 2.0 percent of the manufacturer's recommended mix ratio.

Rescind Table 714-5 Resin / Pigment Component (% By Weight) and replace with the following:

TABLE 714-5
RESIN / PIGMENT COMPONENT (% BY WEIGHT)

PIGMENT	WHITE	YELLOW
TiO2, meeting ASTM D-476, Type II	18-28	12-17
Organic Yellow		7-9
Epoxy Resin	72-82	74-81